CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, November 4, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(denotes that this work is advertised in Engineering News.)*

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
11- 5	*Quarters, Ft. Du Pont, Del.	10- 7
11- 5	*Water system, Cincinnati, O.	(S)10-21
11- 6	Seawall, dredging, Norfolk, Va.,	(S.)10-21
11- 6	Water supply, Wash. D. C.	(S)10-21
11- 6	Paving, Charleston, S. C.	(S.)10-21
11- 6	Cistern, Key West, Fla.	(S.)10-14
11- 6	*Removing bridge, Peoria, Ill.	(P. & S.)10-28
11-10	*Pumping engine, Dallas, Tex.	(S.) 9-23
11-16	*Steel pipe, Toronto, Ont.	(S.)10-28
1-17	*Irrigation, Porto Rico	(P. & S.)..
11-20	Dredging, Charleston, S. C.	(S.)10-21
11-20	Generating set, Wash., D. C.	(S.)10-21
11-27	Pneumatic system, Charleston, S. C.	(S.)10-28
11-27	Seawall, N. Chicago, Ill.	(S.)11- 4
11-27	Roads, walks, N. Chicago, Ill.	(S.)11- 4
12- 1	*Heating, ventilating, New Zealand	(P. & S.) 9- 9
1-17	*Irrigation, Porto Rico	(P. & S.)10-21
1-18	Dry-dock, New York	(S.)10-21

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

11- 5	*Motors, pumps, etc., Spokane, Wash.	10-21
11- 8	Condensers, etc., Richmond, Va.	10-21
11- 8	*Lighting fixtures, etc., Fort H. G. Wright, N. Y.	10-21
11- 8	Electricity, Savannah, Ga.	10- 7
11- 8	*Elec. light plant, Orange, N. J.	10-28
11- 9	*Elec. lighting system, Fort Dupont, Del.	10-14
11-10	*Elec. lighting system, Whipple Barracks, Ariz	10-21
11-15	Lighting streets, San Diego, Cal.	10-28
11-15	*Electric fixtures, West Point, N. Y	11- 4
11-17	Lighting, etc., Frankfort, Ky.	11- 4
11-20	Generating set, Wash., D. C.	10-21
11-26	Lighting system, Council Bluffs, Iowa	11- 4

BRIDGES.

11- 5	Bridge floor, Cincinnati, Ohio	10-21
11- 6	Bridge, Phoenix, Ariz	10-21
11- 6	Bridges, Eaton, Ohio	10-21
11- 6	*Bridge work, Washington, D. C.	10-28
11- 6	*Removing bridge, Peoria, Ill.	10-28
11- 8	Replanking bridge, Ellendale, N. Dak	10-21
11- 8	Bridges, Richmond, Va.	11- 4
11- 9	Superstructures, Pawnee City, Neb.	11- 4
11- 9	Bridge, Milwaukee, Wis	11- 4
11- 9	Bridge, Kappa, Ill.	11- 4
11- 9	Bridge approaches, Newport, Ind.	11- 4
11- 9	Bridge, Jersey City, N. J.	11- 4
11-10	Bridges, Denison, Iowa	11- 4
11-12	Substructures, etc., McCook, Neb.	11- 4
11-12	Bridge, Vancouver, B. C.	10-28
11-15	Bridge work, Quebec, Que.	11- 4
11-16	Bridges, Aberdeen, S. Dak	10-28
11-16	Bridges, La Moure, N. Dak	10-21
11-16	Substructure, Cleveland, Ohio	10-28
11-19	Bridge, Cincinnati, Ohio	10-28
11-22	Bridge bonds, Spokane, Wash	10-21
11-29	Bridge, Batavia, Ill.	11- 4
11-30	Substructure, Quebec, Que.	11- 4

BUILDINGS.

11- 8	School, St. Paul, Minn.	10-14
11- 8	Jail, Los Angeles, Cal.	10-21
11- 8	Fire station, New York	11-28
11- 8	Library, etc., Brockport, N. Y.	10-28
11- 9	Cottages, Industry, N. Y.	10-28
11- 9	Laundry, Sonyea, N. Y. (Mfg. Pl.)	10-28
11-10	Capitol, Helena, Mont.	9-30
11-10	Storehouse, New York	10-28
11-10	Building, New York	11- 4
11-11	Post-office, Ft. Dodge, Iowa	10-14
11-12	Cottage, Bedford, N. Y.	10-28
11-15	Bldgs., Ft. Washington, Md.	10-28
11-15	Prison, Columbus, Ohio	10-28
11-15	Quarters, Columbus Barracks, O.	10-28
11-15	*Post-office, New Haven, Conn.	10-21
11-15	Building, Tallahassee, Fla.	11- 4
11-15	Fire stations, New York	11- 4
11-15	Heating, etc., New York	11- 4
11-16	Court-house, jail, Gastonia, N. C.	11- 4
11-16	*Bakery, Ft. Du Pont, Del. (Mfg. Pl.)	10-27
11-16	*Post-office, Belleville, Ill.	10-14
11-16	Stable, Ft. McPherson, Ga.	10-28
11-17	Bakery, Ft. Missoula, Mont. (Mfg. Pl.)	10-28
11-18	Quarters, Ft. Wayne, Mich.	10-28
11-18	Post-office, Rock Island, Ill.	10-28
11-18	Barracks, Philadelphia, Pa.	10-28
11-19	Court-house, New Haven, Conn.	10-28
11-20	Plans, Hartford, Conn.	10-28
11-20	*Quarters, Ft. Douglas, Utah	10-21
11-22	*Hospital, Ft. Terry, N. Y.	10-28
11-24	Post-office, Montgomery, Ala.	10-28
11-24	Bakery, Boise Barracks, Idaho (Mfg. Pl.)	11- 4
11-26	Heating, etc., Council Bluffs, Ia.	10-28
12- 1	*Heating, ventilating, New Zealand	9- 9
12- 1	*Capitol, Little Rock, Ark.	10-21
12- 2	Post-office, New Brunswick, N. J.	10-28
12- 6	*Quarters, etc., Ft. Meade, S. Dak.	11- 4

WATER-WORKS.

11- 5	Filtration plant, Breckenridge, Minn.	11- 4
11- 5	Water pipes, Chicago, Ill.	11- 4
11- 5	Water pipe, Norwalk, Ohio	11- 4
11- 6	Boilers, Ashtabula, Ohio	11- 4
11- 6	Cistern, Key West, Fla.	10-14
11- 6	Water supply, Indian Head, Md.	10-21
11- 9	*Engines, Detroit, Mich.	10-21
11- 9	Main extension, Fort Dade, Fla.	10-21
11-10	*Pumping engine, Dallas, Tex.	9-23
11-10	Mains, New York	10-28
11-10	Well, Fort Sill, Okla.	11- 4
11-10	Water-works, Dumas, Ark.	11- 4
11-15	*Canal, Palisade, Colo.	11- 4
11-15	*Dam, Clifton, Colo.	10-28
11-15	Pumps, Fort McIntosh, Tex.	11- 4
11-15	*Gate-house, Newburgh, N. Y.	10-28
11-15	*Water system, Cincinnati, Ohio.	10-14
11-17	*Test borings, New York	11- 4
11-17	Mains, Brooklyn, N. Y.	11- 4
11-18	*Boilers, Grand Rapids, Mich.	11- 4
11-19	*Pump-house, Fort Hancock, N. J.	10-21
11-22	Water bonds, Spokane, Wash.	11- 4
11-24	*Dikes, New York	11- 4
11-27	Pipe system, Charleston, S. C.	11- 4

SEWERS.

11- 5	Sewer extensions, Salt Lake City, Utah	10-28
11- 5	Sewer, Fort D. A. Russell, Wyo.	10-21
11- 5	Drains, Chicago, Ill.	11- 4
11- 5	Sewers, Trenton, Tenn.	11- 4
11- 8	Sewers, Oklahoma City, Okla.	11- 4
11- 8	Sewers, Youngstown, Ohio	11- 4
11- 8	Sewers, Houston, Tex.	10-28
11- 8	Sewer, New York	10-28
11- 9	Sewage pumping engines, Providence, R. I.	10-28
11- 9	Sewer, Providence, R. I.	11- 4
11-10	Sewer, Fort Leavenworth, Kan.	11- 4
11-10	Sewers, Brooklyn, N. Y.	10-28
11-10	*Steel pipe, etc., Toronto, Ont.	10-14
11-15	Sewer system, Fort Ward, Wash.	11- 4
11-15	Sewer bonds, Louisville, Ohio	10-21
11-16	*Sewers, E. Providence, R. I.	10-28
11-16	Sewers, Minneapolis, Kan.	11- 4
11-18	Sewers, Dunnville, Ont.	11- 4
11-19	*Sewer extensions, Roselle Park, N. J.	10-28
11-22	Sewers, Salem, S. Dak.	11- 4

STREETS AND ROADS.

11- 5	Macadam, Warren, Ohio	10-28
11- 5	Paving, Salt Lake City, Utah	10-28
11- 5	Paving, Bucyrus, Ohio	11- 4
11- 6	Wagon road, Saguche, Colo.	11- 4
11- 6	Paving, Charleston, S. C.	10-21
11- 8	Alley impvt., Wabash, Ind.	10-21
11- 8	Paving, Huntington, W. Va.	10-28
11- 8	Paving, etc., Apollo, Pa.	11- 4
11- 8	Street work, Oakwood, Ohio	11- 4
11- 8	Paving, Athens, Ohio	11- 4
11- 8	Road, Ft. Benjamin Harrison, Ind	011- 4
11- 8	Macadam, Kansas City, Kan.	11- 4
11- 9	Road, Jersey City, N. J.	11- 4
11- 9	Street work, Huntington, Ill.	11- 4
11- 9	Paving, Toledo, Ohio	10-28
11- 9	Graveling, Jefferson, Ia.	10-14
11-10	Street impvt., Madison, Wis.	10-21
11-10	Paving, New York	10-28
11-10	Roads, Olathe, Kan	10-28
11-10	Road, Vancouver Barracks, Wash.	10-28
11-11	Paving, Pittsburg, Pa.	11- 4
11-12	Pavement, Alva, Ohio	11- 4
11-15	Macadam, Bristol, Tenn.	11- 4
11-16	Road, Flemington, N. J.	11- 4
11-16	Highway, Chandler, Okla.	10-28
11-16	*Subways, paving, Auburn, N. Y.	10-28
11-17	Paving, etc., New York	11- 4
11-18	*Highways, New York	11- 4
11-19	Paving, etc., Denver, Colo.	11- 4
11-19	Paving, Two Rivers, Wis.	10-21
11-23	*Paving, etc., Paducah, Ky.	11- 4

MISCELLANEOUS.

11- 5	Fire engines, New York	10-28
11- 5	Earthwork, Erie, Kan.	11- 4
11- 6	Seawall, dredging, Norfolk, Va.	10-21
11- 8	Steel castings, etc., Panama	10-21
11- 8	Levee, Sacramento, Cal.	10-28
11- 8	Ditches, Estherville, Iowa	11- 4
11-10	Copper work, Atlanta, Ga.	10-21
11-10	Timber sale, Toronto, Ont.	10-28
11-10	Supplies, New York	10-28
11-11	*Ditch, Monticello, Ill.	11- 4
11-11	Earth fill, New York	11- 4
11-11	Removal (garbage), New York	11- 4
11-13	*Ditch, Clinton, Ill.	10-28
11-15	*Machinery, Cincinnati, Ohio	10-21
11-15	*Dam, Clifton, Colo.	10-28
11-15	Filling in, Olympia, Wash.	11- 4
11-16	Dam, Burleigh Falls, Ont.	11- 4
11-17	Cement, New York	11- 4
11-18	Masonry repairs, New York	11- 4
11-20	Drainage canal, Timberville, Miss.	11- 4
11-20	Dredging, Charleston, S. C.	10-21
11-27	Pneumatic system, Charleston, S. C	10-28
11-27	Seawall, N. Chicago, Ill.	11- 4
11-30	*Channel, Baltimore, Md.	11- 4
12- 1	Barge canal, Albany, N. Y.	11- 4
12- 1	*Fire apparatus, Wash., D. C.	11- 4
12- 1	Drainage ditches, Liberty, Tex.	10-28
1-17	*Irrigation work, Porto Rico	10-21
1-18	Dry dock, New York	10-21
2- 1	(1910) Monuments, Ottawa, Ont.	10-21

FOREIGN CONTRACTS.

11-12	Sanitary project, Spain	11- 4
12-10	Competitive plans, Argentina	11- 4

EXAMINATIONS.

11- 8	*Sub-Inspector, Boston, Mass.	10-28
11-13	Supt. Highways, Albany, N. Y.	10-28
11-22	Mechanical Draftsman, Phila., Pa.	10-21
11-23	Examiner of Accounts, Wash., D. C.	10-21
11-23	Junior Electrical Engr., Wash., D. C.	10-28
11-23	Junior Engr., Wash., D. C.	11- 4
11-24	Junior Chemist, Wash., D. C.	11- 4
11-24	Inspector's Asst., Wash., D. C.	10-21
11-24	Drainage Engr., Wash., D. C.	10-21

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ALABAMA TERMINAL R. R. (Atlanta, Birmingham & Atlantic).—We are officially advised that contracts have been let for building the line between Bessemer and Birmingham, Ala., ten miles, as follows: NICHOLS CONTRACTING CO., Atlanta, Ga., seven miles; FURTWANGLER & SMITH, of Birmingham, three miles. Noted last week.

ANACOCO VALLEY.—This company has been chartered in Louisiana with $25,000 capital. Headquarters, Grabow, La. The incorporators are members of the Galloway Lumber Co., which operates a mill at Grabow. While the primary object of the railroad is to tap the company's timber supply, it will eventually reach the rich farming country in the Anacoco and Sabine valleys about Almadane. M. M. Galloway is Pres. and Gen. Mgr.; J. U. Kerr, Vice-Pres., and Marzook Galloway, Sr., Secy. and Treas.; and these officers, with James Galloway and M. Galloway, Jr., constitute the Board of Directors.

ATLANTA, BIRMINGHAM & ATLANTIC.—See Alabama Terminal R. R.

BEAVER VALLEY & NORTHWESTERN.—J. M. Kerns, of Beaver, Okla., Gen. Mgr. of the Beaver Valley & Northwestern R. R. Co., which is to build from Gage to Hooker, Okla., via Beaver, the county seat of Beaver County, states that active operation will commence before the first of the year, according to the Beaver "Herald." The first section of the road to be built is from Hooker to Beaver, a distance of 40 miles.

CENTRAL RAILWAY OF CANADA.—Application will be made for extension of time to build this line. The company was organized about three years ago to build from Montreal, Que., west via Toronto and Ottawa to Port of Midland, on Georgian Bay, about 670 miles. H. W. Raphael, Montreal, Que., is interested.

COAHUILA, CHIHUAHUA & NORTHWESTERN.—Contracts will be awarded at once to build this railway, from a point on the International division of the National Railways of Mexico at Monclova, in the State of Coahuila, west to a crossing of the Rio Concho at Julimes, thence west to Chihuahua, in the State of the same name, which is on the Kansas City, Mexico & Orient, the Mexican Central and the Mexico Northwestern lines, a distance of about 350 miles. The line will traverse a coal and iron and agricultural country. Pablo Casasus is Pres., and T. S. Abbott, Ch. Engr., Saltillo, Coahuila. Noted on Oct. 14.

FORT WORTH & RIO GRANDE.—Contracts will be let at once for construction of a branch line from Brady, in McCulloch County, Tex., southwest to Menardville, 37 miles. W. B. Drake is Vice-Pres. and Gen. Supt., Fort Worth, Tex.

GAINESVILLE MIDLAND.—Surveys are under way on proposed extension, about 50 miles from Gainesville to Robertstown, Ga., with branch from Chestatee to Willow, Ga., via Price and Murrayville. Two large bridges will be built, one over the Chattahoochee River and the other over the Chestatee River; also several creeks requiring 50-ft. spans. E. B. Epps is Gen. Mgr. and Treas., Gainesville, Ga.

GEORGIA, FLORIDA & ALABAMA.—An extension probably will be built from Kimbrough to Richland, Ga., six miles. C. G. Barney, Bainbridge, Ga., is Ch. Engr.

LOUISVILLE & NASHVILLE.—We are officially advised that MASON & HANGER CO., Richmond, Ky., have been awarded contract for eight miles of railroad at Grofton, Ky. (heavy shovel, team and drag-line excavator work). Contractors desiring to take subcontracts may communicate with A. B. Mason, at Grofton, Ky.

OSAGE WESTERN.—We are officially informed that E. J. Noonan has been appointed Chief Engineer of the Osage Western Railway Co., which was recently chartered to construct a railway from Bartlesville, Okla., to Enid, Okla., a distance of 125 miles. Noted last week.

PHILADELPHIA & READING.—W. Hunter, Ch. Engr., informs us that Contracts Nos. 2 and 12 (reletting), P. G. & N. Elevated R. R., have been awarded to the JAMES McGRAW CO., 1010 Arcade Bldg., Philadelphia. Contract No. 2 is for the foundations for steel viaduct from south side of Brown St. to north side of Jefferson St.; Contract No. 12, masonry, embankment, paving, water and drainage systems, fence and gates, new office building, scale foundation, concrete steps and pavement for yard at Master St. (Bids were received on May 11 for this work and the two contracts were awarded to OWEN J. EVERS, Philadelphia, at $237,307 and $92,342. The reletting of these contracts was made necessary through the failure of the original contractor to keep within the time requirements.) Noted last week.

PUEBLO & SAN LUIS VALLEY.—See item under Electric Railways—Pueblo, Colo.

SANDY RIVER & RANGELEY LAKES.—We are officially advised that contracts will be let about March 1, 1910, for building an extension from Madrid Junction to Sandy River Township, 5½ miles, and from Carrabassett (Bigelow post-office) to Stratton, Me., 24 miles. Surveys are made and capital and right-of-way secured. Henry F. Hill is Ch. Engr., Augusta, Me.

UNION PACIFIC.—A cut-off will be built from Dodd, Colo., to Denver, shortening the line 36 miles between Omaha and Denver. R. L. Huntley, Ch. Engr., Omaha, Neb.

WACO, BELTON & GEORGETOWN.—Incorporated in Texas to build a railroad from Waco south to Georgetown, where it will connect with the Missouri, Kansas & Texas and the International & Great Northern roads. The route of the proposed road is through a territory lying just west of the first-named road. The road will be built with Texas capital, and then turned over to the International and Great Northern to operate. It will be about 80 miles long. The promoters are E. Rotan, Dr. S. P. Brooks, J. C. Dillard, W. D. Lacy and W. W. Seley, all of Waco, Tex.

WAMEGO & ROCK CREEK VALLEY.—Chartered in Kansas with $300,000 capital. The railroad is planned to run from Westmoreland to Emporia by way of Wamego and Alma, Kan., and will be 75 miles long. The incorporators were not announced.

ELECTRIC RAILWAYS.

McKEESPORT, PA.—The Pittsburg, McKeesport & Westmoreland Railway has been granted a franchise to operate a street railway in McKeesport. The railway will connect McKeesport and Westmoreland, 19 miles. It is planned to have the line in operation in McKeesport within a year. Noted on Sept. 30. Geo. D. Cook is Secy., 25 Broad St., New York; T. I. Robertson is Vice-Pres., West Newton, Pa.

BELLEFONTE, PA.—The Center County Traction Co. has been chartered, with $100,000 capital stock. Company will build lines to connect Bellefonte with Milesburg and State College, all in Center County, with a total mileage of about 15 miles. The incorporators are: William C. Hagan, Arrott Bldg., Pittsburg, Pres.; J. C. Meyer, Robert Hunter and L. T. Munson, of Bellefonte, and W. M. Furey, 341 Fourth Ave., Pittsburg.

ROYERSFORD, PA.—The Royersford Interurban Traction Co. has been incorporated to build a 4-mile electric railway in Royersford. Capital stock, $25,000. Incorporators: Joseph A. Buckwalter and R. S. Raiser, of Royersford; A. B. Eddowes, W. W. Levering and W. H. Houston, of Philadelphia.

SALISBURY, N. C.—The Piedmont St. Ry. Co. has awarded the contract for the grading of this electric railway in Concord to W. A. FOIL, Concord, it is reported. The railway will extend from Salisbury to Concord via China Grove and Landis.

HENDERSONVILLE, N. C.—The Hendersonville Light & Power Co. will construct 4½ miles of electric railway from Hendersonville to Parceola Lake. The company has issued $100,000 of bonds for the construction. C. H. Broward is Supt.

GALLATIN, TENN.—C. H. Fidler, of Gallatin, who is promoting an electric railway here, advises us that contracts will be let as soon as capital is secured. The line will run from Gallatin to a connection with the Tennessee Central R. R., 18 miles east of Nashville. It will be about twelve miles long. Surveys are partly made; right-of-way is practically all obtained. Noted on Oct. 14.

KANKAKEE, ILL.—We are officially advised that the Kankakee & Urbana Traction Co. has made preliminary survey for its proposed railway and has secured about 75% of its right-of-way. Capital has not been obtained yet. The line will connect Kankakee and Urbana and thence to Villa George, Camargo and Charleston, 125 miles. Work will include heavy interurban construction. W. J. Brock is Pres. and W. D. Moore, Jr., is Ch. Engr., 184 Court St., Kankakee, Ill. Fully noted on Oct. 7.

BELLEVILLE, ILL.—Grading has been started on the line of the Belleville & Mascoutah Transit Co. The railway will be about ten miles in length. Adolph Knobeloch is Pres.; E. R. Haguist, Vice-Pres.; G. J. Scheve, Secy.-Treas., and David O. Thomas, Gen. Mgr. and Supt., Mascoutah, Ill. Noted on Aug. 19.

PORTAGE, WIS.—We are officially advised that the Chicago & Wisconsin Valley R. R. Co. has awarded contract to the WESTERN INDIANA CONSTRUCTION CO., Portage. The line will be about 180 miles long and will run from Janesville to Merrill, Wis., as fully noted on Oct. 7. Allen T. Russell, Portage, is Ch. Engr.

DES MOINES, IOWA.—The Des Moines & Sioux City R. R. Co. is stated to have awarded construction contract to the AMERICAN NATIONAL CORPORATION, of Indianapolis. Surveys have been made. J. W. Reed is Pres., Ida Grove, Iowa. Noted on Sept. 30.

ALBIA, IOWA.—The Albia Interurban Ry. Co. may build a 9-mile extension from Albia to Buxton. W. E. Gant is Mgr. and Supt. Company now operates a 10-mile line connecting Albia, Hiteman, Hocking and South Albia. Noted on Dec. 31, 1908.

BRECKENRIDGE, MINN.—The Wahpeton & Breckenridge St. Ry. Co. has been incorporated to build an electric railway to connect Breckenridge and Wahpeton, N. Dak. Capital stock, $50,000. Incorporators: D. J. Jones, Secy.; Joseph Gunn, of Breckenridge, and F. L. Strum. Noted on May 20.

KANSAS CITY, KAN.—We are officially informed that the Kansas City, Olathe, Ottawa & Iola Ry. Co. will not let contracts before the first of the year. The line will be 110 miles long, connecting Kansas City and Iola, Kan. Surveys have been made for 80 miles and right-of-way obtained for distance of 50 miles. Hugh A. Holmes is Pres., Kansas City, Mo. The Standard Engineering Co., Garfield Bldg., Cleveland, Ohio, has charge of the engineering work.

JAMESTOWN, N. DAK.—The Jamestown Traction Co. will build a line to connect Jamestown, Fried, Spiritwood and Courtenay. Capital stock, authorized, $150,000. J. J. Nierling is Pres.; Morris Beck, Vice-Pres.; L. B. Niemeyer, Secy.; F. A. Lenz, Treas.

ST. JOSEPH, MO.—We are officially advised that the St. Joseph & Savannah Interurban R. R. Co. will let construction contracts soon. As noted on Oct. 14, the railway will be constructed from St. Joseph northward for a distance of about 14 miles. Surveys are made and right-of-way is practically obtained. Capital for construction has been secured. J. H. Van Brunt is Pres., and C. W. Campbell is Ch. Engr., St. Joseph, Mo.

PUEBLO, COLO.—The Pueblo & San Luis Valley R. R. & Power Co. has incorporated in Colorado with $8,000,000 capital, to build from Pueblo, Colo., west into Fremont and Custer Counties through Wet Mountain valley, passing through Silver Cliff, thence south into Huerfano County to the Sangre de Christo mountains, crossing that range and running west into Saguache or Costilla County at a point not yet decided upon, thence west or southwest to either Alamosa, Monte Vista or Del Norte. From the western terminus an electric railway system is to be constructed up and down the San Luis Valley, reaching Alamosa, Del Norte, South Fork, Center, Saguache, Moffat, Hooper, Mosca, Blanca, La Jara, Sanford, Manassa, Antonio and Capulin. The line may eventually be extended south to Pagosa Springs and to Durango. At a number of places along the line the company will build spur tracks into mining and timber sections, agricultural districts and to quarries, it is said. The incorporators include: J. L. Hurt, of Center; C. L. Smith, of La Jara; J. I. Palmer, of Saguache; D. H. Sullivan, of Alamosa; J. Ewing, Jr., of Del Norte, and J. A. Kelly, of Monte Vista.

TORONTO, ONT.—F. L. Fowke, M. P., will present a bill to the Dominion Parliament applying for authority and charter for the Toronto & Eastern Ry. Co. to build an electric line connecting Cobourg and Toronto, passing through Port Hope, Newcastle, Bowmanville, Oshawa and Whitby.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

WASHBURN, ME.—The Washburn Electric Co. has been granted permission to erect transmission lines here. E. M. Hines is Pres. and Mgr

WATERVILLE, ME.—The Committee on Public Buildings has awarded contract to the WATERVILLE & FAIRFIELD RAILWAY & LIGHTING CO., B. F. Maxfield, Ch. Engr., to furnish electricity for lighting the city hall and armory.

MORRISVILLE, VT.—The citizens have voted to authorize the Water and Light Commissioners to award contract to the MOUNT MANSFIELD ELECTRIC R. R. CO., of Stowe, Vt., to furnish energy to operate its railway, and to supply electricity to the village of Stowe for lamps at $30 per H.P. per year, with a minimum of $2,500 per year.

BOSTON, MASS.—We are officially advised that bids were received as follows by Lieut. Col. Edward Burr, Corps Engrs., U. S. A., on Oct. 30, for motor generator sets, motors, centrifugal pumps, transformers and lighting arresters: Fort Wayne Electric Works, Fort Wayne, Ind., $10,257; General Electric Co., 84 State St., Boston, Mass., $10,983; Wagner Electric Mfg. Co., St. Louis, Mo., $10,968; Westinghouse Electric & Mfg. Co., Pittsburg, Pa., $10,236. Montgomery & Co., 105-107 Fulton St., New York, bid $2,297 on transformers only. The bid was not considered as it was not according to specifications.

GREENFIELD, MASS.—Extensive improvements are to be made to the power plant of the Greenfield Electric Light & Power Co., H. D. Seevey, Ch. Electrician, including the construction of a new boiler house to accommodate five boilers. A new steam turbo-generator set with a rating of from 750 to 1000 KW. will be installed.

TONAWANDA, N. Y.—Preparations are being made by the McKinnon Chain Co., of Buffalo, N. Y., recently incorporated to manufacture an electrically welded chain by a new process, for the construction of a factory building 304 ft. x 80 ft. and a power house 30 ft. x 40 ft., both of steel and concrete construction, here. A large amount of special machinery will be required.

NEW YORK, N. Y.—The LORD ELECTRIC CO., 213 West 40th St. has been awarded contract at $71,842, by the Park Board for furnishing material and installing electric light and power plant in the New York Public Library, Fifth Ave., 40th and 42nd Sts. Bids were opened in Oct. 21. List of bidders noted in Oct. 28.

*WEST POINT, N. Y.—Bids are asked by the Quartermaster, U. S. A., West Point, until noon, Nov. 15, for furnishing and installing electric and combination gas and electric light fixtures in Battalion Guard-House and Chaplain's Quarters.

BUFFALO, N. Y.—See item under Manufacturing Plants.

WILMINGTON, DEL.—The Board of Water Commissioners on Oct. 18 awarded to GARRETT, MILLER & CO. contract for furnishing and installing an electric motor, generator, switchboard, etc., necessary for the operation of the new filter plant at the Porter reservoir, at about $5,605.

THURMONT, MD.—The Citizens' Electric Light & Power Co., has been incorporated with $15,000 capital stock by John R. Rouzer, Morris A. Birely, Martin L. Creager and others to establish plant operated by water-power for supplying electricity for lighting streets.

STANLEYTON, VA.—Contract for the construction of an electric light plant has been awarded to P. H. TROUT, of the Shenandoah Electric Co., of Staunton, Va.

FORT SPRING, W. VA.—B. F. Mann will build a water-power-electric plant to develop 1000 HP. for transmission by electricity. The construction of dam 47 ft. high, 150 ft. at base and 250 ft. at top is planned.

HAWKINSVILLE, GA.—The city opened bids for equipment for electric-light plant, and awarded contract at $970 to J. S. SCHOFIELD SONS CO., Macon, Ga., for high-pressure boiler developing 150 HP.; at $2,865 to WISCONSIN ENGINE CO., Corliss, Wis., for Corliss engine with generator direct connected; at $5,113 to WESTINGHOUSE ELECTRIC & MFG. CO., 307 Fifth St., Pittsburg, Pa., for generator, switchboard, arc and tungsten system. Estimated total cost, $15,500.

BRENT, ALA.—Plans are being considered by the Thompson Lumber Co. for the construction of a mill to replace the one recently destroyed by fire. A Corliss engine or steam turbine will probably be installed and electrical apparatus may be required.

BESSEMER, ALA.—Plans have been prepared by D. O. Whilldin, Title Guarantee Bldg., Birmingham, Ala., for the construction of a building 140 x 30 ft., for the Birmingham Light & Power Co., of Birmingham.

PARIS, KY.—Paris Electric Light Co., J. W. James, Ch. Electrician, has petitioned the City Council for a franchise for installing a plant to furnish daylight electric power, heat and light.

FRANKFORT, KY.—Bids will be received until Nov. 17 by the Board of Regents, Kentucky Normal and Industrial Institute, care of Andreson & Frankel, Engrs., Lexington, for heating and lighting the Trades and Auditorium buildings on the campus of said institute, bids to be submitted as follows: Heating plant, consisting of boiler room equipment, and the heating pipes and radiation, etc.; engine, generator, switchboard and electric wiring and fixtures, etc., lighting of the campus and gasoline engine.

MANISTEE, MICH.—The Manistee County Electric Co. has been granted a franchise by the Board of Supervisors of Manistee County to erect seven dams on the Manistee River and its tributaries. It is expected that work will commence on the construction of the first of these dams at once.

RACINE, WIS.—The Belle City Malleable Iron Co. has commenced work on the construction of a new building for its works and installation of a power plant, the equipment to include an engine-driven 200-KW. generator and motors for operating machines. New blowers for furnaces will also be required.

ELKHORN, WIS.—Plans are being considered for enlarging the municipal electric light and water plant to include an addition to the power house, 24 x 40 ft. Contracts for construction will soon be awarded.

MANITOWOC, WIS.—Contracts have been awarded by the Aluminum Foundry Co., for the construction of a foundry and power house. The latter, will be equipped with gas engines, pumps and compressor.

COUNCIL BLUFFS, IOWA.—Bids are asked by James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., until Nov. 26 for a lighting and conduit system at the U. S. Post Office and Court House and extension at Council Bluffs.

VIRGINIA, MINN.—Plans have been prepared by W. A. Wilkinson, Arch. and Engr., Security Bank Bldg., Minneapolis, Minn., for the construction of a power house and planing mill for the Edward Hines Lumber Co.

McKINLEY, MINN.—The citizens have voted to issue $5,000 of bonds for the construction of an electric light plant.

IPSWICH, S. DAK.—Oscar Claussen, of St. Paul, Minn., is preparing plans for a plant for the Ipswich Electric Light & Power Co. Estimated cost, $10,500.

HELENA, MONT.—Bids were opened on Oct. 18 by the City Council for the installation of an electric light plant. Two bids were received as follows: Sheffield Power Co., of Kansas City, Mo., $20,000; Kilborne & Clark Co., 113 Marion St., Seattle, Wash., $26,000. Each plant was to be guaranteed efficiency of 400 HP. The Butte Electrical Supply Co., of Butte, bid $20,000 for the poles, wire and other transmission equipment.

GLASGOW, MO.—See item under Water Supply—Irrigation.

AURORA, MO.—The City Council has granted a 20-year franchise to the Springfield Gas & Electric Co., H. J. Fox, Supt., Springfield, for the installation of a gas plant here. The cities of Monett, Marionville and Pierce City are also reported to have granted franchises to this company.

GLASGOW, MO.—The citizens have voted to issue $30,000. of bonds to purchase the local electric light plant and for improvements to the water works system.

FESTUS, MO.—The city has voted $15,000 of bonds for electric lights.

ARKANSAS CITY, ARK.—A contract has been awarded by the Land & Power Co., which owns and controls the Arkansas City Gas & Electric Co., at $21,000 to the ALLIS-CHALMERS CO., of Milwaukee, Wis. The contract calls for a new steam turbine and generator, also a separate generator, and two boilers and condenser.

HENRYETTA, OKLA.—Edwin R. Knecht, of Shelbyville, Ill., has secured franchise to install an electric light plant in Henryetta.

OKLAHOMA CITY, OKLA.—See item under Water Supply—Irrigation.

DENVER, COLO.—Plans and specifications are being prepared by the South Platte Power Co. for a new power plant to be constructed at Mill Gulch, about 20 miles from here. Estimated cost about $1,500,000. The plans include the construction of transmission lines to Castle Rock, Littleton, Platte Canyon and other summer resorts, including a line to the city limits of Denver. Godfrey Schirmer, of the German-American Trust Co., and Adolph Zang, of the Zang Brewing Co., are interested.

CIMARRON, N. M.—The application of Charles Springer, of Cimarron, for 95 cu. ft.-second of water of the Rio Honde River in Taos County has been approved by the Territorial Engineer. The water will be utilized to develop 5000 HP., and the development will cost about $200,000.

SAN FRANCISCO.—Contract for the construction of the sub-station of the Sierra & San Francisco Power Co., in Visitacion Valley, south of San Francisco, has been awarded to DUNCANSON & HAROLDSON. The United Railroads of this city will receive electricity through this station from the Stanislaus Power Company's plant.

CORNING, CAL.—The County Commissioners have granted the Sacramento Power Co., a franchise to operate its system in Tehama County.

*FORT DOUGLAS, UTAH.—We are officially advised that bids were received as follows on Oct. 26 by 1st Lieut. Kenneth P. Williams, Acting Q. M., U. S. A., for the construction of an electric lighting system complete: F. E. Newberry Electric Co., St. Louis, Mo., $43,419; Meteor Electric Co., Salt Lake City, Utah, $36,254; Falkenau Electrical Construction Co., Chicago, Ill., $48,378; Salt Lake Electric Supply Co., Salt Lake City, $33,775.

VERDUN, QUE.—Contracts have been awarded by the municipality for equipment for the municipal electric light plant as follows: For two engines to LAURIE & LAMB, of Montreal, Que., agents for Belliss & Morcom, Birmingham, England, at $9,000; two 235 KW., 3 phase, engine-type generators with direct-connected exciters and switchboards complete to the CANADIAN WESTINGHOUSE CO., at $7,532. Charles Brandeis, of Montreal, Que., is Consulting Engr.

POINTE AUX TREMBLES, QUE.—The Parish of Pointe aux Trembles has awarded an exclusive franchise to the Saraguay Electric & Water Co., to furnish electricity for lamps and motors. The territory extends from Boute de Isle to Longue Pointe, embracing about 35 miles on the Island of Montreal.

TORONTO, ONT.—Contracts have been awarded by the Hydroelectric Commission in connection with the transmission lines, transformer stations and all mechanical equipment as follows: To ROYCE, LTD., of Manchester, England, for electric cranes for the transformer stations at Niagara Falls and Dundas; for electric cranes for the transformer stations at Toronto, London, Guelph, Preston, Berlin, Stratford, St. Mary's Woodstock and St. Thomas, to MUSSENS, LTD., of Montreal and Walkerville. Total amount of bids, $17,094.

BRIDGES.

BOSTON, MASS.—The Superintendent of Streets on Oct. 21 opened bids for repairing and strengthening the Berkley St. bridge over the Boston & Albany and New York, New Haven & Hartford Railroads as follows: Boston Bridge Works, 47 Winter St., Boston, $13,550; W. H. Ellis, $14,685; Jones & Meehan, $23,540.

NEW YORK, N. Y.—Bids were received as follows on Oct. 82 by the Department of Parks for work and materials required for the erection and completion of a bridge at Shore Road and First Ave., Boro. of Brooklyn: H. L. Brown Co., 225 Fifth Ave., New York, $89,800; Leo E. Kelley, $136,000; Luke A. Burke & Son, 25 West 42d St., New York, $107,000; N. E. Construction Co., $112,674; D. J. Ryan, $118,919; Louis Wheeler, 1133 Broadway, New York, $119,350; Rogers & Haggerty, $132,459; Ryan-Parker Co., $123,000; Cooper-Evans Co., 220 Broadway, New York, $126,126; Goodwin Contracting Co., $129,994; McHarg-Barton Co., 299 Broadway, New York, $126,000; Galandi Granite Co., $122,500.

NEW YORK, N. Y.—The SNARE & TRIEST CO., 143 Liberty St., has been awarded contract, at $43,570, for constructing a steel viaduct at St. George, Staten Island, by the Department of Docks. Bids were opened on Oct. 11. List of bidders noted on Oct. 21.

WHITE PLAINS, N. Y.—Contract for constructing a bridge over the Mamaroneck River, at Purdy Ave., bids opened on Oct. 18, has been awarded by the town to the ALAMO CONSTRUCTION CO., 215 W. 125th St., New York. Frank J. Lamb is Town Clk.

*RYE, N. Y.—We are officially advised that all bids received by George L. Henderson, Village Clk., on Oct. 20, for building a bridge with abutments and retaining walls, filling in the roadway and building a macadam road on Highland Road, Rye, bridge to be built on 24-in. beams, with connecting arches of concrete, have been rejected. C. E. Nightingale is Village Engr.

JERSEY CITY, N. J.—Bids will be received until 4 p. m., Nov. 9, by the Joint Committee of the Boards of Chosen Freeholders of the Counties of Essex and Hudson, at Jersey City, for constructing a bridge on the Newark Plank Road over the Passaic River, Walter O'Mara is Clk. Hudson County Bldg., Jersey City.

PITTSBURG, PA.—The following contracts have been let by the county for riprapping and repairs to bridges: J. C. MARSHALL, Harmarville, Pa., for repairs to bridge No. 6, Deer Creek; DANIEL STRATTON, McKeesport, Pa., for riprapping at Bridge No. 1, Piney Fork; WILLIAM MALENONT, Hillsborough St., Pittsburg, for repairs to Bridge No. 1, Piney Creek, Bridge No. 5, Montout Run, Bridge No. 3; Days Run and Bridges Nos. 2, 7, 11, 14, 16, 17, 19 and 21, Piney Creek. Bids were opened on Oct. 18.

RICHMOND, VA.—Bids are asked until noon, Nov. 8, by the State Highway Commission for constructing two steel bridges in Appomattox County.

FLOYD, VA.—We are officially advised that the Roanoke Bridge Co., Roanoke, Va., on Oct. 27 submitted the lowest bid for the construction of a steel bridge over Little River between Floyd and Montgomery Counties to the State Highway Commission.

ALBEMARLE, N. C.—Winston-Salem Southbound R. R., O. H. P. Cornell, Ch. Engr., Winston-Salem, will construct two small steel bridges across Long Creek.

NATCHITOCHES, LA.—BOYDSTON & O'QUIN, Natchitoches, have been awarded contract, at $15,000, for constructing a creosoted pile bridge over Black Lake by the Police Jury. Bids were opened on Oct. 18.

KNOXVILLE, TENN.—The Board of Public Works will award contract on Nov. 9 for the construction of the Asylum Ave. viaduct.

MORRISTOWN, TENN.—James Susong and J. R. Forgey have awarded contract to the CONVERSE BRIDGE CO., Chattanooga, TENN., for the erection of $10,000 steel bridge across Chuckey River.

HAMILTON, OHIO.—The Board of Public Service on Oct. 14 received the following bids for constructing the G St. viaduct: Joseph T. Guillaume, $12,560; Joseph L. Gardner, $12,534; CAPITOL CONSTRUCTION CO., Columbus, Ohio, $12,300 (awarded contract).

NEWPORT, IND.—Bids are asked until 10 a. m., Nov. 9, by H. T. Payne, County Audr., for constructing approaches to the Horse Shoe Ford bridge over Little Vermillion River in Verillion Township, the work including 1,000 cu. yds. excavation, 2,500 cu. yds. embankment and one corrugated iron culvert 20 ft. long. Fred Rush is Engr., Indiana National Block, Terre Haute, Ind.

FLOODWOOD, MICH.—Bids are asked until Nov. 10 by V. S. Hillyer, Ishpeming, for labor and materials for constructing a bridge and its abutments over the Michigamme River, two miles north of here. W. H. Johnston is Chn. County Rd. Comrs.

IONIA, MICH.—The Board of Supervisors have voted $9,000 for the construction of a bridge across the Grand River in Danby Township.

FLINT, MICH.—Contracts for the construction of a new 3-span reinforced-concrete bridge, over the Flint River, connecting the factory district with a well settled part of Burton Township that has not yet been taken into the city, has been let to WYNCOOP & McGORMLEY, of Toledo, Ohio, at $16,000. The center arch will be 80 ft. long, with the two end spans 40 ft. each.

BATAVIA, ILL.—Bids are asked by the Town Commissioners until Nov. 29 for the construction of a steel bridge across Mahaney Creek.

KAPPA, ILL.—Bids are asked by the Road and Bridge Committees of the Boards of Supervisors of McLean and Woodford Counties until 10 a. m., Nov. 9, for the construction of a bridge over the Mackinaw River, near here. There are three spans, the main one 180 ft., the north and south spans each 800 ft. The main span will rest on steel tubes 25 ft. long and 4 ft. thick. The north and south spans will rest on concrete abutments 20 ft. high and 5 ft. wide at the bottom and 3 ft. at the top.

MILWAUKEE, WIS.—Bids are asked by the Board of Public Works until Nov. 9 for constructing a bascule bridge across the Milwaukee River connecting Michigan and Sycamore Sts. Work to begin Jan. 4, 1910, and be completed Sept. 4, 1910. Charles J. Poetsch is City Engr.

DENISON, IOWA.—Bids will be received until Nov. 10 by the Board of County Commissioners for constructing steel and wooden bridges throughout the county for the year 1910. M. J. Collins is County Audr.

NEW DULUTH, MINN.—The Minnesota Steel Co., subsidiary of the U. S. Steel Corporation, has awarded contract for constructing a steel bridge across the St. Louis River near New Duluth to the AMERICAN BRIDGE CO. The bridge will be 300 ft. long, double-decked for steam and electric railroad and passenger and horse traffic.

BELLWOOD, NEB.—The STANDARD BRIDGE CO., Omaha, Neb., has been awarded contract for building new bridge over the Platte River.

PAWNEE CITY, NEB.—Bids are asked until 10 a. m., Nov. 9, by the County Commissioners for furnishing all material and for the construction and erection of the superstructures, substructures and approaches for 16 or more county bridges. Frank L. Evans is County Clk.

McCOOK, NEB.—Bids will be received by Charles Skalla, County Clk., until Nov. 12 for the construction of the substructures and approaches of all steel and wooden bridges to be built within one year from Nov. 12, 1909.

HOUSTON, TEX.—The city and Harris County contemplate the construction of two bridges on Houston Ave. over White Oak Bayou and over Beauchamp's Bayou. Estimated cost, $30,000. H. B. Rice is Mayor.

TULSA, OKLA.—Tulsa County has voted $75,000 of bonds for the construction of bridges.

OKLAHOMA CITY, OKLA.—The Oklahoma County Commissioners have awarded contract at $18,000 to the VINCENNES BRIDGE CO., Vincennes, Ind., for the construction of 14 steel bridges in connection with drainage of Deep Fork Canal.

SHIPROCK, N. MEX.—Bids were opened on Oct. 15 as follows by the Commissioner of Indian Affairs, Washington, D. C., for constructing a steel highway bridge across the San Juan River, San Juan Reservation, N. Mex.: Midland Bridge Co., Kansas City, Mo. (steel joists), $9,928, (wood joists), $8,-690, to be completed May 1; Minneapolis Steel & Machinery Co., Minneapolis, Minn., $9,625, Feb. 1; M. J. PATTERSON CONSTRUCTION CO., Denver, Colo., 14-ft. joists, wood, $7,776, 16-ft. joists, wood, $8,724 (awarded contract), 14-ft. joists, steel, $8,-739, Feb. 1.

ROCK CREEK, ORE.—The County Commissioners on Oct. 22 awarded contract to O. H. STRATTON for constructing county bridges Nos. 33 and 34 over Rock Creek near here, at $4,430.

OAKLAND, CAL.—Contract for constructing a combination bridge over Alameda Creek on Niles Canyon Road, bids opened on Oct. 18, has been awarded by the County Commissioners to STEPHENSON & HOARD, of Oakland, at $9,339. John P. Cook is County Clk.

QUEBEC, QUE.—Bids will be received by L. K. Jones, Secy., Dept. of Railways and Canals, Ottawa, Ont., until 4 p. m., Nov. 30, for building the substructure of the Quebec bridge. The general specifications and forms of bidding will be ready about Nov. 20; in the meantime contractors may receive preliminary information at the office of the Quebec Bridge Board of Engineers, Canadian Exposition Bldg., Montreal.

Bids are also asked until 4 p. m., Nov. 15, for the removal of the wreckage of the Quebec bridge in the anchor arm and on that portion of the cantilever arm, down to low water.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

BELFAST, ME.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of the post-office at Belfast, Me., to WILLIAM H. FISSELL & CO., St. James Bldg., New York, at $35,483. A list of bidders was given on Oct. 21.

MANCHESTER, N. H.—James Knox Taylor, Superv. Arch. of the Treasury Department, Washington, D. C., has rejected all bids recently received for the construction of a post-office at Manchester, N. H., as being in excess of the appropriation.

BOSTON, MASS.—A contract involving nearly $1,000,000 has been secured by the NATIONAL FIRE PROOFING CO., Old South Bldg., Boston, for furnishing the Fargo Trust Co., of Boston, wool buyers, with terra-cotta hollow tile to be used in fireproofing two warehouses to be erected immediately by the Boston concern. Each building to be erected will be ten stories high, 120 ft. deep and 420 ft. long, similar in construction to the Pittsburg Terminal warehouses. They will be built throughout with hollow tile. A third building of the same dimensions also may be erected.

SPRINGFIELD, MASS.—A fireproof garage building will be erected by William J. Hyland, at 34 Sanford St., where the office of the Annable Lumber Co. was formerly. The building will be of brick and concrete and will be built heavy enough to permit putting on four stories more later. The building will be leased to the Morse-Readio Co. There will be an entrance from East Court St., from which there is a 20-ft. right-of-way to the property on which the new garage will stand. The structure will be 80 ft. on Sanford St., and 100 ft. deep. It will accommodate 35 cars and will leave space enough through the middle for two cars to stand abreast. The second floor of the building will be occupied as a machine and repair shop.

NEWPORT, R. I.—L. P. Hutton, Arch., 37 Liberty St., New York, is preparing plans for the 5-story fireproof brick, stone and steel Army and Navy Y. M. C. A. Building, 100x200 ft., to be erected at Newport, R. I., at a cost of about $150,000. Noted on Oct. 21.

GREENWICH, CONN.—Walker & Gillette, Archs., 131 West 40th St., New York, have prepared plans for the proposed club house for the Fairfield County Golf Club. It will be of rubble stone and frame construction, two stories, and will cost about $80,000. It will be 180 x 60 ft. The general contract has been let to GEORGE MERTZ & SONS, Port Chester, N. Y.

STONY POINT, N. Y.—A state prison, to cost $2,000,000, is to be erected here. Plans have been approved and probably will be ready for bids about Nov. 15. The prison will be constructed of brick and stone and will be fireproof. Charles F. Howard, M. D., is Pres. of State Comn. on New Prisons. William J. Beardsley, Poughkeepsie, N. Y., is Arch.; Franklin B. Ware, Capitol, Albany, is State Arch.

NEW YORK, N. Y.—The Bankers' Trust Co., 7 Wall St., is to build a structure which will be 20 stories high and will cost about $1,750,000. The trust company will occupy only the lower two floors. Trowbridge & Livingston, 527 Fifth Ave., are Archs. The building is to be L-shaped with 60 ft. frontage on Wall St. and 28.5 ft. on Nassau St. It will take the place of the old Stevens Building, erected in 1880, and will abut the First National Bank Building and face the Sub-Treasury. To provide the money, the company increased its capital from $1,000,000 to $3,000,000. The general contract has been let to MARC EIDLITZ & SON, 489 Fifth Ave.

The general contract has been awarded to CARLOS FASSELL, INC., 489 Fifth Ave., to erect the 12-story store and loft building, 50x75 ft., at the southwest corner of Sixth Ave. and 32d St., for the estate of Frank B. McDonald. The plans are being completed by George Keister, Arch., 12 West 32d St. The facade will be of light faced brick and limestone. Total cost, about $200,000.

A tentative plan is being considered by the officers of the Lincoln Safe Deposit Co., for adding nine stories to its building on the south side of 42d St., between Madison and Park Aves. The present walls of the structure bear all the weight they were designed to support, as two stories were added to the original structure several years ago, thus making it nine stories. Under the proposed plan, 20 steel pillars will be carried from bed rock through the building, spaced about 50 ft. apart, over the entire area, which measures 120x200 ft. On the pillars will be built the nine new stories. There will be no weight added to the walls of the existing building.

Operations are under way for the 12-story elevator apartment house which the Guide Realty Co., 2875 Broadway, is to erect at the northwest corner of West End Ave., and 99th St., to cost about $800,000. Neville & Bagge, 217 West 125th St., are Archs. There will be apartments for 60 families. A. C. Hall is Pres.; H. M. Hall is Secy.

NEW YORK, N. Y.—Plans for enlarging the 4-story dwelling at 109 East 38th St., owned by Mrs. C. De R. Moore, call for a new facade in the Colonial style, with ornamental balconies at the second story, and a balustrade finish to the roof. The improvements are to be made at a cost of $40,000.

The general contract to erect the Camolin Building, at the northwest corner of Fifth Ave. and 43d St., has been awarded to CHARLES T. WILLS, INC., 156 Fifth Ave. It is expected that the building will be ready for occupancy in the early part of 1910. The exterior will be made up of light-colored brick and limestone, architectural ironwork, with a slag roof. It will have a frontage on the avenue of 29 ft. and 125 ft. in the street. Andrew J. Connick is president of the Camolin Realty Co. Hoppin & Koen, 244 Fifth Ave., are Archs.

The Waunegan Realty Co., 35 Nassau St., will erect a 6-story apartment house, 177.8 x142.2 ft., at the southeast corner of Ft. Washington Ave. and 165th St., to cost $225,000. Schwartz & Gross, 347 Fifth Ave., are Archs.

PAUL J. EXNER, 1 Madison Ave., has secured the contract for the mason work for the 6-story loft building, 50x90 ft., to be erected at 417-419 East 93d St., from plans by Charles Stegmayer, 168 East 91st St. A. Happel, 408 East 93d St., is owner. Estimated cost, $40,000.

The new store and office building to be erected by John E. Olson, builder, 39 East 28th St., on the site of the Gilsey House, northeast corner of Broadway and 29th St., fronting 64.5 ft. on Broadway and 48.8 ft. in 29th st., will have 25 stories, and will cost about $1,250,000. Estimates on all contracts are to be taken about Jan. 1. Noted on Oct. 14.

NEW YORK, N. Y.—Maximilian Zipkes, Arch., 353 Fifth Ave., is preparing plans for a 10-story loft building to be erected on a plot, 40x92 ft., at 133 West 19th St. The plans will be ready in about two weeks.

The Downey Const. Co., 308 East 142d St., owner and builder, is ready for bids on separate contracts for two 4-story tenements, brick and limestone, to accommodate 17 families, and stores, and to be erected at the southwest corner of Longwood Ave. and Barry St., The Bronx. Cost, $55,000. Harry T. Howell, Third Ave. and 149th St., is Arch.

Schwartz & Gross, Archs., 345 Fifth Ave., are preparing plans for a 6-story apartment house, 110x87 ft., to be erected on 163d St., east of Broadway, for B. House, 8 West 39th St. The building will be non-fireproof and of limestone, brick and terra-cotta construction.

PAUL E. LINBLAD, 103 Park Ave., has secured the contract for the carpenter work on the 8-story store and loft building, 50 x100 ft., which Hollander & Co. are erecting at 550-552 Fifth Ave., from plans by Buchman & Fox, 11 East 59th St. The HEDDEN CONSTRUCTION CO., 1 Madison Ave., is the general contractor, C. Matlock, 220 Broadway, is steam and electrical engineer. The estimated cost is about $125,-000.

NEW YORK, N. Y.—A loft building, 50x20 ft., eight stories high and to cost $60,000, is to be erected at 412 Pearl St. The structure will be fireproof and of brick and concrete construction. The general contract has been let to P. J. BRENNAN & SON, 624 Madison Ave., New York.

THOMAS B. LEAHY, 1 East 42d St., has secured the masonry contract for the 5-story building for St. Joseph's Home for the Aged. The structure will be 53x103 ft., located at 200 West 15th St., and will cost $150,000. I. E. Ditmars, 111 Fifth Ave., is the Arch.

NEW YORK, N. Y.—The contract to erect a freight shed on the pier between 31st and 32d Sts., Brooklyn, has been let to CHARLES MEADS CO., 299 Broadway, New York, at $155,500, by Allen N. Spooner, Comr. Docks and Ferries.

L. T. Alten, 1418 Broadway, is taking estimates for a 6-story loft building, 50 x 90 ft., to cost $50,000. The structure will be erected at 514 West 33d St., will be non-fireproof, and of brick and stone construction. D'Oench & Yost, 289 Fourth Ave., are Archs.

NEW YORK, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10.30 a. m., Nov. 16, for furnishing all the labor and materials required for additions and alterations to heating and power plant in the fire department repair shops building, northeast corner of 59th St. and 12th Ave., Boro of Manhattan; for furnishing all the labor and materials required for repairs to quarters of Engine Company 75, located on Jerome Ave., near 183d St., and Engine Company 52, located on Riverdale Ave., near Spuyten Duyvil Parkway; for furnishing all the labor and materials required for steam heating repairs at quarters of 21 companies in Brooklyn.

Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, until 2 p. m., Nov. 10, for erecting a building for storehouse and shop at the 179th St. pumping station, located near Amsterdam Ave., and 174th St., Boro. of Manhattan.

BUFFALO, N. Y.—Ground has been broken for the proposed Central Presbyterian Church at Main St. and Jewett Ave., which will be built at a cost of $100,000. The building will be of English Gothic design. The Rev. R. V. Hunter is pastor.

BUFFALO, N. Y.—Lansing & Beierl, Archs., 371 Pearl St., have let contracts for construction of the Central Park Presbyterian Church, at the corner of Main St. and Jewett Ave. It will be of granite and Indian limestone, 40x60 ft. and one and two stories high. Cost, $100,000.

ROCHESTER, N. Y.—H. T. Whitfield, 160 Fifth Ave., New York, has completed revised plans and has taken new figures for a 2-story laboratory and Applied Science Building, 40x80 ft., for the Rochester University. Estimated cost, $60,000.

EDGEMERE (L. I.), N. Y.—A hotel, 72 x190 ft., to cost $60,000, is to be erected on Bay Ave., Edgemere. The building will be non-fireproof, will have four stories and basement and will be constructed of brick and stucco. It will contain about 75 rooms. William K. Benedict, 1135 Broadway, New York, is Arch.

HOBOKEN, N. J.—James Knox Taylor, Superv. Arch. of the Treasury Department, Washington, D. C., has awarded contract for the construction of the post-office at Hoboken, N. J., to the WILLS & MARVIN CO., 1170 Broadway, New York, at $49,591.

MADISON, N. J.—The Board of Education has awarded the general contract to CORBETT & CLARK, of Madison, for the proposed public school, to cost $43,000. The masonry contract has been let to JOHN V. CORBETT, of Madison. Dr. C. W. Scarsborough, 19 Wilmer St., Madison, is Clerk Board of Education. H. King Conklin, 45 Clinton St., Newark, N. J., is Arch. The school will be 2½ stories high, 72x101 ft., and will be of reinforced-concrete construction.

NEWARK, N. J.—Charles C. Jones, 280 Broadway, New York, will prepare plans at once for a limestone church for the Clinton Hill Methodist Protestant Congregation, at Newark, to cost about $40,000.

ATLANTIC CITY, N. J.—It is announced here that James McCrea, Pres. of the Pennsylvania R. R. Co., has arranged for a conference with the Finance Committee of the City Council upon the building of terminal station to cost $1,000,000 or more. It is proposed that the city share in the expense and also the subsequent revenues.

WAVERLEY, N. J.—The Carnegie Steel Co., 30 Church St., New York, has awarded contracts for warehouse buildings in the New York district. The warehouses of the company are located at Waverley, N. J., and there the buildings are being enlarged. The specifications call for an extension to the bar warehouse, 65 ft. wide and 500 ft. long, which is to be equipped with new cutting machinery. The second building order is for an extension to the general warehouse 140 ft. wide and 315 ft. long. The AMERICAN BRIDGE CO., 50 Church St., has the contract for the construction of the additions. The new buildings will be ready in the early spring.

SUMMIT, N. J.—Coalidge & Carlson, 22 Congress St., Boston, Mass., are taking estimates for a Sunday school and auditorium addition to the Methodist Episcopal church here. A. H. Tuttle, Pastor. Estimated cost, $50,000.

LANCASTER, PA.—James Knox Taylor, Superv. Arch. of the Treasury Department, Washington, D. C., has rejected all bids recently received for the post-office at Lancaster, Pa., except the two lowest, as being in excess of the appropriation. Bids will be asked from these two on modified specifications.

PHILADELPHIA, PA.—Ground will be broken at once by John G. Brown for the erection of a reinforced concrete warehouse at the southwest corner of Chancellor and Warnock Sts., and extending to Clifton St. for P. Blakiston Sons & Co., 1012 Walnut St., at a cost of $40,000. The plans provide for a 6-story building of reinforced concrete construction, 42.10x78.3 ft., designed specially for the fireproof storage of book plates and valuable papers. The permit has been granted.

PHILADELPHIA, PA.—Bids are asked by the Quartermaster, U. S. Marine Corps, Washington, D. C., until 11 a. m., Nov. 18, for the erection of an extension to the Marine Barracks, Navy Yard, Philadelphia, Pa. The plans call for a 3-story addition, 50x300 ft. to the Marine Barracks at the League Island Navy Yard. The building will be of colonial design to correspond with the barracks already built. Its cost will be about $250,000. The basement of the building will be fitted up for recreation purposes. A mess hall, officers' quarters and rooms for N. C. O. will occupy the first floor. The upper floors will be used as dormitories. Rankin, Kellogg & Crane, 1012 Walnut St., Philadelphia, are Archs. Noted last week.

A permit for the erection of a 6-story concrete warehouse, 29x280 ft., on the east side of Third St., north of Race St., for H. O. Wilbur & Sons, Inc., was granted the TURNER-PORMAN CONCRETE STEEL CO., Commonwealth Bldg. Cost, $95,000.

BALTIMORE, MD.—We are officially advised that the contract for the proposed 15-story addition to the Fidelity Bldg., at the northwest corner of Charles and Lexington Sts., has been let to MORROW BROS., 216 West Saratoga St., Baltimore. The work will cost nearly $1,000,000. Baldwin & Pennington, Professional Bldg., Baltimore, are Archs.

WASHINGTON, D. C.—The secretary of the Interior, Washington, D. C., has awarded contract for the construction of an additional wing to the Freedman's Hospital, Washington, to the PAGE CONSTRUCTION CO., of Washington, at $68,000.

ROANOKE, VA.—See item under Streets and Roads.

GASTONIA, N. C.—Bids are asked by the Board of County Commissioners until Nov. 16, for the erection and completion of a court-house and jail according to plans and specifications prepared by Milburn, Heister & Co., Archs., Home Life Bldg., Washington, D. C. We are officially advised that there will be two buildings, three stories high, to cost, complete, $70,000. The structures will be fireproof, and of brick and steel construction.

TALLAHASSE, FLA.—Bids are asked by F. P. Fleming, Jacksonville, Fla., until 11 a. m., Nov. 15, for constructing the Administration Building for the Florida State College for Women, to be erected at Tallahassee. Edwards & Walker, Chandler Bldg., Atlanta, Ga., are Archs.; P. K. Yonge is Chm. Bd. of Control, State of Florida.

COLUMBUS, MISS.—The following bids were received on Oct. 22, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of the U. S. post-office at Columbus, Miss.: J. W. Stanzel, Columbus, Miss., $73,833.95; time, 18 months. Geo. Becking, Chattanooga, Tenn., $52,799; time, Jan. 1, 1911. D. J. Phippe, Newport News, Va., $53,-509; time, Jan. 1, 1911. McClanahan & Terry, Columbus, O., $59,550; time, Jan. 1, 1911. NEWPORT CONSTRUCTION & ENGINEERING CO., Newport News, Va., $51,-826; time, Jan. 1, 1911 (awarded contract). W. M. Allen Son & Co., Meridian, Miss., $52,820; time, Jan. 1, 1911. Rubush-Dobbs Construction Co., Meridian, Miss., $58,833; time, one year. Gude & Co., Atlanta, Ga., $57,500; time, Nov. 1, 1910.

DYERSBURG, TENN.—We are officially advised that Dyer County has raised $60,000 for building a court-house. The committee on building will be chosen by the County Court on Nov. 9. W. A. Fowlkes is interested.

BOWLING GREEN, KY.—James Knox Taylor, Superv. Arch. of the Treasury Department has rejected all bids for a post-office at Bowling Green, Ky., as being in excess of the appropriation.

CLEVELAND, OHIO.—The plans of Hubbell & Benes, Archs., Citizens Bldg., Cleveland, for the proposed Cleveland Museum of Art, have been accepted by the Museum Trustees. The building will be erected near the Lake Erie, in Wade Park, and it is to be one architectural treatment from the water's edge to the building. A boat landing and boathouse will rise from the shore of the lake, and a monumental stairway will lead from the landing to the building.

ELGIN, ILL.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Elgin, Ill., to W. J. McALPINE, Dixon, Ill., at $36,600.

MANITOWAC, WIS.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Manitowoc, Wis., to the MAJESTIC CONSTRUCTION CO., Milwaukee, Wis., at $72,327.

MILWAUKEE, WIS.—M. Wachowsky will build for himself at 715-717 Central Ave., a concrete and brick apartment house to cost $75,000. J. Jacobi, 1311 Chestnut St., is Arch.

H. W. Buemmming, Arch., Pabst Bldg., has awarded the general contract for erecting brick and steel stables for the American Express Co., at 216-220 Huron St., Milwaukee, to J. P. JONES & CO., 386 Kenilworth Pl., Milwaukee. Cost, $40,000.

The Plankinton Estate has asked for plans for a 10-story office and business block to be erected on the triangle, at Wells, West Water and Second Sts., Milwaukee. Jeremiah Quin, Plankinton Block, is Mgr.

The Common Council Committee on Fire and Police has decided to recommend that an open competition for architects be held to obtain suitable plans for the proposed Criminal Building to cost $250,000. Charles J. Poetsch is City Engr.; E. V. Koch, Bldg. Inspector.

MADISON, WIS.—George A. Lougee, Mgr. of the Park Hotel, has purchased a site at Monona and Doty Sts., and will erect a hotel in 1910 or 1911. Probable cost, $200,000.

RACINE, WIS.—The First National Bank, George N. Pratt, Cashier, has decided to erect a new banking house to cost $75,000 next year.

ST. PAUL, MINN.—C. H. Johnston, Arch., Manhattan Bldg., is receiving bids for the construction of a Christian Science church at Summit, Portland and Grotto Sts. It will be fireproof, built of cut stone, with steam heating, electric lighting. Cost, $100,-000.

A. J. Nason, City, is having plans prepared by Buechner & Orth, Archs., Manhattan Bldg., City, for the construction of an 8-story pressed brick and cut stone, fireproof wholesale building, to be built on Fifth St., near Robert St. It will be 50x140 ft., having steam heating, plate glass, electric lighting and two electric elevators. The contract for the excavation and foundation has been let to J. H. NICKEL, 614 Endicott Bldg., City, and bids will be called soon for the superstructure. Cost, $75,000.

*FORT MEADE, S. DAK.—Bids are asked until 10 a. m., Dec. 6, by the Constructing Q. M., for constructing one double set of quarters for two company officers and four cavalry stables, and for installing plumbing, heating, electric wiring and electric lighting fixtures in buildings specified and for the construction of roads, sidewalks, gutters and drains.

GREAT FALLS, MONT.—James Knox Taylor, Superv. Arch. of the Treasury Dept., has rejected all bids recently received for the construction of a post-office at Great Falls, Mont., as being in excess of the appropriation.

EAGLE PASS, TEX.—Bids were received as follows by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Eagle Pass, Tex.: L. R. Wright, Dallas, Tex., $59,950; Newport Contracting & Engineering Co., Newport News, Va., $52,-424.

SEATTLE, WASH.—A 13-story steel frame and reinforced concrete office building is to be erected at the northwest double corner of Sixth Ave. and Union St., at a cost of between $650,000 and $750,000. Plans for this building are being prepared in the offices of Howells & Stokes, Archs., 100 William St., New York. This office building will be erected by Hendrick Suydam and Mrs. A. W. Denny, who compose the Union Land Co., and will be called the Suydam-Denny building. This office building will be erected in units. The Union St. frontage will be the first to go up. Nine stories will be erected, and the other four if conditions warrant their construction. This portion of the building will have a frontage of 120 ft. on Union St. and 60 ft. on Sixth Ave. The main entrance will be on Union St. There will be three elevators in this portion of the block, and when the Sixth Ave. portion is erected three elevators will be installed in that unit. The plans will provide for connecting corridors. There will be 25 offices on each floor of the first building. The exterior of the two first stories will be finished in granite and terra-cotta, the intermediate stories in brick, and the two top stories in granite and terra-cotta. Stores will be fitted up on the ground floor. Pending the time the second unit is erected, a temporary 1 or 3-story brick building will be erected on a portion of the inside lot. Work on this is to start at once.

SAN FRANCISCO, CAL.—Plans have been completed for a theater building to be erected at the northwest corner of Haight and Cole Sts. The structure will be class A, it will have a steel frame, and will be fireproof, as required by the city's building laws for all theaters. The cost is estimated at $50,000. Hallahan & Getz, have leased the land through G. H. Umbsen & Co. for a term of 50 years at a total rental of $150,000 and they will build the theater. The exterior of the building will be after the Spanish style, and the interior is to be finished in simple lines that will be attractive. There will be no balcony, but the seating capacity will be large.

COALINGA, CAL.—ROBERT TROST, 26th and Howard Sts., San Francisco, Cal., has secured the contract to erect 75 buildings for the Producer's Transportation Co., of Coalinga, Cal. These 75 buildings will constitute a group of 15 stations, each station comprising a group of three cottages, one dormitory, one stable, all of which will be of frame construction, a pumping station of steel and galvanized iron. These stations will be scattered from San Luis Obispo through Antopi Valley over the Mountain to a place called Junction, from which place two branches will extend to Coalinga and Bakersfield. A branch line will also run from McKittricks to Midway and Sunset. Mr. Trost's contract also calls for the supply of all machinery for the stations. Forty-five boilers will be installed. The contract will amount to about $300,000. The same company is now building a warehouse of reinforced concrete at Sacramento, the contract for which was awarded to MR. TROST. The foundations are now in. Mr. Trost also has the contract for a refinery building at Bakersfield for the same company.

BOISE BARRACKS, IDAHO.—See item under Manufacturing Plants.

TORONTO, ONT.—Bids are asked until noon, Nov. 10, by the Secretary of the School of Mining for the erection and completion of a Chemistry Building for the Governors of the School of Mining. Power & Son are Archs.

NEW WESTMINSTER, B. C.—The British Columbia Electric Ry. Co. plans to construct a station in New Westminster, it is stated. The building, which will be the terminus for the Fraser Valley division, will have the ground floor finished with marble. The upper stories, the structure consisting of three stories, at first, and five stories, later, are to be used for offices.

ARGENTINE REPUBLIC. — Competitive plans for building. See item under Foreign Contracts.

WATER SUPPLY—IRRIGATION.

BRATTLEBORO, VT. — The Brattleboro Water-Works Co. has decided to build the spillway of its reservoir in Pleasant Valley high enough to hold back 120,000,000 gallons of water from the start, instead of 80,000,000 gallons as at first contemplated.

HINGHAM, MASS.—Bids were received as follows on Oct. 30 by the Bureau of Yards and Docks, Navy Department, Washington, D. C., for the installation of a fresh-water system at the Naval Magazine, Hingham: Fred T. Ley, 307 Main St., Springfield, Mass. (1) $11,000, (2) $10,000; McCay Engineering Co., 9 East Lexington St., Baltimore, (1) $7,737, (2) $7,137, (3) $7,237, (4) $6,837; Moore & Co., 12 Pemberton Square, Boston, (1) $12,237; C. M. Leach, Boston, Mass., (1) $10,573, (2) $9,673; Newport Contracting & Engineering Co., Newport News, Va., (1) $9,578, (2, $8,524; Dan Di Pietro & Co., 424 Hanover St., Boston, (1) $10,542; Peter F. Connally, Jamaica Plains, Boston, (2) $10,-800, $9,000.

NEW YORK, N. Y.—We are officially advised that JOHN H. ROCHE has been awarded contract by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for the high-pressure fire service of the city of New York for the Borough of Manhattan, 17th, 18th, 19th, 20th, 21st and 22d Sts., from Seventh to Tenth Aves., at $87,558. List of bidders noted on Oct. 21. In that issue the bid of Mr. Roche was incorrectly stated as $91,000.

NEW YORK, N. Y.—The following bids for furnishing and driving or sinking wells at Bayside, in the Third Ward, Boro. of Queens, were received on Oct. 27 by John H. O'Brien, Comr. Water Supply, Gas and Electricity: P. H. & J. Conlan, 253 Lafayette St., Newark, N. J., $14,988; Phoenix Construction Co., 1123 Broadway, New York, $20,915; Grant Rohrer, $24,470; Sweeney & Gray, $18,635.

*NEW YORK, N. Y.—We are officially advised that RINEHART & DENNIS, Evans Bldg., Washington, D. C., have been awarded contract by the Board of Water Supply for Contract 55, of the Catskill aqueduct, at $4,545,487. Bids were opened on Oct. 20. List of bidders noted last week. This contract is located in the towns of New Castle and Mount Pleasant, Westchester County, and consists of a series of eight tunnels aggregating four miles in length with inside dimensions of 17 ft. high and 13 1-3 ft. wide; also six miles of plain concrete conduit, inside dimensions 17 ft. high and 17½ ft. wide, known as cut-and-cover aqueduct, making a total of ten miles of work.

Bids are asked by the Board of Water Supply until 11 a. m., Nov. 17, for Contract 73, for making test borings expected to require casing deeper than 200 ft. or to attain a total depth greater than 500 ft., aggregating about 10,000 lin. ft., in the Boroughs of Manhattan and Brooklyn, New York City.

*NEW YORK, N. Y.—Bids are asked until 11 a. m., Nov. 24, by the Board of Water Supply, for Contract 60, for the construction of the Hurley dikes of the Ashokon reservoir, known as Glenford, Woodstock and West Hurley dikes. For details see advertisement in this issue.

BROOKLYN, N. Y.—Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, until 2 p. m., Nov. 17, for furnishing, delivering and laying a trunk distribution main and appurtenances in Glenmore, Pennsylvania and Bushwick Aves., and in Madison St. and for furnishing, delivering and laying a trunk distributing main and appurtenances in Albany, Clarkson Woodruff, Ocean, Caton, Coney Island, Church and 14th Aves., and in 50th St., Boro. of Brooklyn.

BROOKLYN, N. Y.—The following were bids received on Oct. 27 by Bird S. Coler, Boro. Pres., for supplying all labor and materials of every kind and description and constructing the station building to be known as the power and gate houses and appurtenances complete for the Gowanus flushing tunnel, situated at Douglass St. and the head of the Gowanus Canal in the Borough of Brooklyn: Henry E. Fox, 81 East 125th St., New York, $28,000; Snare & Triest, 143 Liberty St., New York, $41,850; Daniel J. Ryan, $34,299; George Hilderbrand, 38 Park Row, New York, $39,440; T. J. Buckley Construction Co., $42,305; United Plumbing & Construction Co., $43,948.

*OLIVE, N. Y.—The following were the bids received on Oct. 27 by the Board of Water Supply for Contract No. 31 for furnishing and installing four 48-in. controlling valves with expansion pieces, operating mechanisms and appurtenances at the lower gate chamber of Ashokan Reservation, near Browns Station in the town of Olive: Ogden Iron & Steel Mfg. Co., Bayonne, N. J., $54,900; Coldwell-Wilcox Co., Newburgh, N. Y., $291,-916.

*ATLANTIC CITY, N. J.—We are officially advised that contract has been awarded by the Board of Water Commissioners to F. S. LOCKWOOD, Atlantic City, for laying 48-in. wood stave force main from the Absecon pumping station to the city, a distance of about 25,500 ft., at $224,475 (cedar) and $258,475 (Oregon red wood). L. Van Gilder is Engr. and Supt. Noted last week.

PERTH AMBOY, N. J.—The Water Commissioners on Oct. 25 awarded contract for a 12,000,000-gallon high-duty pumping engine to be installed in the city pumping station at Runyon to the WISCONSIN ENGINE CO., of Corliss, Wis., at $32,225.

REIDSVILLE, N. C.—The city has selected E. W. Myers, Engr., Greensboro, N. C., as designing and consulting engineer for improvements to water-works, filtration plant, pumping station, construction of 13 miles of pipe sewers and disposal plant and sidewalks.

WILMINGTON, N. C.—The Water and Sewerage Commission has awarded contract for reconstructing pipe system of water-works plant as follows: For piping, to U. S. CAST-IRON PIPE & FOUNDRY CO., Chattanooga, Tenn., at about $82,417; for hydrants, valves and boxes, to COLUMBIAN IRON WORKS, Chattanooga, at about $6,-486; for construction work, to J. WHIT GURLEY & CO., Mobile, Ala., at about $26,-530.

CHARLESTON, S. C.—Bids are asked until 11 a. m., Nov. 27, by the Bureau of Yards and Docks, Navy Department, Washington, D. C., for extending the pneumatic pipe system here. R. C. Hollyday is Ch. Bureau.

SAVANNAH, GA.—The city has appropriated $5,000 for the extension of the water mains.

CLARKSDALE, MISS.—Walter S. Bobo, City Engr., is preparing plans for water-works and sewers for Oakhurst addition.

MERIDIAN, MISS.—The city contemplates making an enlargement of the reservoir and will install a larger supply of pipe from the reservoir to pump station. William P. Wilcox is Mgr.

ASHTABULA, OHIO.—Bids are asked by the Board of Public Service until noon, Nov. 6, for constructing, delivering and erecting two water-tube boilers, equipped with brick work and other appurtenances. A. J. Richardson is Clk.

NORWALK, OHIO.—Bids will be received until Nov. 5 by the Board of Public Service, T. P. Kellogg, Clk., for furnishing material and constructing a water pipe in Spring St., about 1,000 ft.; also a sanitary sewer in Manahan Ave., about 1,500 ft.

KNIGHTSTOWN, IND.—Contract for constructing water-works here has been awarded by the Board of Trustees to the HARRIS AIR PUMP CO., of Indianapolis, at $6,300.

*GRAND RAPIDS, MICH.—Bids will be received by the Board of Public Works until 8 p. m., Nov. 18, for furnishing and erecting two water-tube boilers or two internally-fired boilers with Morison corrugated furnaces having capacity of 350 to 375 HP. each, at the combination pumping and lighting station, according to the plans and specifications on file at the office of the board. Samuel A. Freshney is Secy. and Gen. Mgr.

CHICAGO, ILL.—Bids will be received until Nov. 5 by the Board of Local Improvements, Charles A. V. Standish, Secy., for constructing water service pipes in W. Daken, State, W. 108th and several other streets.

BRECKENRIDGE, MINN.—Bids will be received until Nov. 5 by the Water and Light Commission, F. L. Pierce, Secy., for that part of the mechanical filtration plant and system covering the following work: Intake basin, pumping machinery, electrical equipment, 150,000-gallon tank and tower, piping and brick buildings. Edward P. Buch is Engr., Minneapolis.

HERRICK, S. DAK.—The Board of Trustees on Oct. 15 awarded contract to the WESTERN ENGINEERING CO., of Yankton, for the construction of a water-works system here at $9,890. Other bidders were: William Krotter, $10,240; Des Moines Bridge & Iron Co., $10,196; A. Beattie, $9,960.

GLASGOW, MO.—The citizens have voted to issue $30,000 of bonds for the construction of water-works and a sewer system, and to purchase the electric light plant.

KANSAS CITY, MO.—The Board of Fire and Water Commissioners, S. J. Armstrong, Secy., on Oct. 21 opened bids as follows for the construction of a centrifugal pump, direct connected to a vertical crank and flywheel, cross-compound, condensing engine, to be installed at Quindara pumping station: The bids follow: Allis-Chalmers Co., of Milwaukee, Wis., $22,090; Camden Iron Works, Philadelphia, Pa., $22,335.

DUMAS, ARK.—Bids will be received until Nov. 10 by the Board of Commissioners, Water-Works Improvement District No. 1, I. N. Moore, Secy., for constructing water-works, requiring about 4,000 ft. of 2-in., 6,000 ft. of 4-in. pipe, 1½ tons specials, a 5-in. deep well pump house, pumps, valves, fittings, etc. Lund & Hill are Engrs., Little Rock.

FORT McINTOSH (Laredo post-office), TEX.—Bids will be received until Nov. 15 by Capt. John J. Clem, Constructing Q. M., U. S. A., San Antonio, for furnishing and installing, complete, ready for use, two outside, center-packed duplex pumps in present pump-house here.

BROWNWOOD, TEX.—The city has voted $20,000 of bonds for improving and extending water mains.

CANYON CITY, TEX.—See item under Sewerage.

FORT SILL, OKLA.—Bids will be received by Capt. David L. Stone, Constructing Q. M., U. S. A., until Nov. 10 for sinking a tubular deep well at Fort Sill.

SAPULPA, OKLA.—The citizens have voted to issue $250,000 of bonds for the construction of water-works. E. D. Kirkpatrick, of Sapulpa, is Engr.

OKLAHOMA CITY, OKLA.—Bids were opened on Oct. 18 by the city for furnishing and installing pumping engine, high-speed steam engine and electrical apparatus, as follows: Electrical apparatus, Southwestern Mfg. Co., $11,900; J. O. Walton Electric Co., $13,340; Russell Engine Co., $13,950; Skinner Engine Co., $13,500; Allis-Chalmers Co., $14,777; English Iron Works, $14,592. Pump, Platt Iron Works Co., two bids, $24,500 and $26,400; Canton-Hughes Pump Co., $24,990; Snow-Steam Pump Co., $26,000; Allis-Chalmers Co., $24,700; Wisconsin Engine Co., $27,500.

SALIDA, COLO.—The Arkansas Flue & Ditch Co. has been formed to construct a canal about 42 miles in length, from the mouth of Arkansas River, a mile east of here, to Parkdale, to carry 600 cu. ft. of water a second. Four power stations will be built along the canal, each to have a head of 275 ft. of water. Estimated cost, $2,500,-000. E. W. Tomlinson, of Canon City, is interested.

*PALISADE, COLO.—Bids are asked until 2 p. m., Nov. 15, by J. D. Reid, Secy. Bd. of Directors of the Mesa County Irrigation District, Palisade, for the construction of an intake canal and accessories in the Grand River in Mesa County.

SPOKANE, WASH.—JOHN T. HUETTER, 420 E. Sharp St., has secured contract from the city for constructing reservoir, at $120,-776. Bids opened on Oct. 12.

Bids are asked by Robert Fairley, City Controller, until Nov. 12 for $500,000 of water extension bonds.

STOCKTON, CAL.—Edwin Duryea, Jr., Mutual Bank Bldg., San Francisco, has completed and presented to the San Joaquin Irrigation District his report on an irrigation system. He recommends that the new district build its own system. He advises that water rights recently secured by trustees of the district as individuals be used, and that the water be taken from Stanislaus River above Tulloch power plant, near Knights Ferry. Rights that would provide the district with 750 cu. ft. per second at low water period have been acquired. The cost of the entire system when completed, including dams, ditches, tunnels, flumes, reservoirs and drainage system, is estimated at $26.59 per acre, or $1,861,500 for the entire district.

PHOENIX, ARIZ.—The Secretary of the Interior has awarded contract to the BYRON JACKSON IRON WORKS, 61 Beaumont St., San Francisco, Cal., for furnishing nine centrifugal pump units for use in connection with the Salt River irrigation project, Arizona. These pumps are to be used to raise underground water for irrigation purposes, and will be operated by power developed at the Roosevelt dam and transmitted electrically nearly 100 miles to the pumping stations. The contract price is $6,[illegible]

SEWERAGE.

(* *denotes that this work is advertised in Engineering News.*)

PROVIDENCE, R. I.—Bids are asked until 2.15 p. m., Nov. 9, by the Board of Contract and Supply, for the construction of a sewer in Kingsley Ave., from Eagle St. to the intercepting sewer in Gaspee St. The work includes 5,620 lin. ft. of 30-in. circular brick and concrete sewer. Material will be furnished by the city.

PLATTSBURG, N. Y.—No contract has been let for constructing about 1,[illegible]00 ft. of 12-in. tile sewer in Cornelia St., and probably will not be contracted for. William D. Savage is Supt. Sewers.

RICHMOND, VA.—The city will ask bids soon for the construction of a sewer system at Forest Hill. Contract for surveying has been awarded to C. P. E. BURGWYN. Estimated cost, $20,000.

ROANOKE, VA.—See item under Streets and Roads.

SOUTH BILTMORE, (Biltmore post-office), N. C.—The city has issued $2,000 of bonds for the construction of a sewer system and water-works.

CLARKSDALE, MISS.—The city has engaged Walter S. Bobo, of Clarksdale, to prepare plans for proposed sewers and water-works for Oakhurst addition.

LAFAYETTE, LA.—The City Council is considering proposition of West Construction Co. to install the sewerage system. Estimated cost, $200,000.

LAKE CHARLES, LA.—Walter G. Kirkpatrick, of Jackson, Miss., has been selected to make surveys and prepare plans for a system of house sewers for Sewer Improvement District No. 1, embracing about 15 miles of pipe sewers. C. D. Moss is Chn. Sewer Comrs.

NASHVILLE, TENN.—The Board of Public Works has awarded contract at $4,384 to T. V. BARNESFIELD, Nashville, for constructing a sewer in Alley 201, between Third and Fourth Aves., North.

TRENTON, TENN.—Bids are asked by the city until Nov. 5 for the construction of a system of sanitary sewers, about 35,000 ft. of vitrified sewers from 8 to 18 ins. in diameter, manholes, flush tanks, etc.

NORWALK, OHIO.—See item under Water Supply—Irrigation.

YOUNGSTOWN, OHIO.—Bids will be received until Nov. 8 by the Board of Public Service, W. H. McMillin, Clk., for furnishing material and constructing sewers in Byron St.

INDIANAPOLIS, IND.—The Board of Public Works has awarded the following sewer contracts: Sewer in Sutherland St., from 30th St. to a point 1,620 ft. north, to the RELIABLE CONSTRUCTION CO., at $2.25 per lin ft.; sewer in Park St., from Highland Drive to 42d St., to the SHEEHAN CONSTRUCTION CO., at $2.22; sewer in Ruckle St., from the center of Highland Drive to a point 38 ft. south of 42d St., to MANLEY-O'DONNELL & CO., at $1.91; local sewer in Broadway, from Highland Drive to 42d St., to JOHN JENKINS, at $2.51; local sewer in the alley north of Minnesota St., from a point 51 ft. east of the third alley east of East St., to a point 47 ft. east of the first alley east of East St., to A. BRUNER CO., at $1.05; local sewer in Pennsylvania St., from 38th St. to a point 39 ft. south of 42d St., to the COMMERCIAL CONSTRUCTION CO., at $2.14.

CHICAGO, ILL.—Bids will be received until Nov. 5 by the Board Local Improvements, Charles A. V. Standish, Secy., for constructing drains in Bond, Howard and Commercial Aves., and several other streets.

BERWYN, ILL.—The CHARLES M. PORTER CO., 84 LaSalle St., Chicago, Ill., has been awarded contract at $17,038, for constructing a sewer in 15th St. and other streets.

CHARLES CITY, IOWA.—The O'FARRELL CONTRACTING CO., Dubuque, Iowa, has been awarded contract at $5,562, for constructing six sewers here.

BOONE, IOWA.—Plans are being prepared for the construction of pipe sewers. Bids will probably be asked in December. Otto Hile is City Clk.

MINNEAPOLIS, KAN.—Bids will be received until Nov. 16 for the construction of sanitary sewers from plans of Burns & McDonnell, Scarritt Bldg., Kansas City, Mo.

FORT LEAVENWORTH, KAN.—Bids will be received until 11 a. m., Nov. 10, by Capt. William D. Davis, Q. M., U. S. A., for constructing a trunk sewer here.

CHERRYVALE, KAN.—We are officially advised that RUSHMORE & GOWDY, of Cherryvale, have been awarded contract for constructing the sewage purification plant at Cherryvale at $6,450. Bids were opened on Oct. 18.

SALEM, S. DAK.—J. J. DUNNEGAN has secured contract at $8,250 for constructing a main sewer for this city. Bids were opened on Oct. 18.

Bids are asked until Nov. 22 by N. M. Nelson, City Audr., for constructing several lateral sewers.

GLASGOW, MO.—See item under Water Supply—Irrigation.

CAMDEN, ARK.—The Commissioners of the Fourth Improvement District have awarded contract to the POUNCEY PAVING & CONSTRUCTION CO., of Helena, for the construction of a sewer at $5,530.

LITTLE ROCK, ARK.—Contract was awarded on Oct. 21 by the Commissioners of Sewer District No. 55 for the construction of sewers here to PFEIFER & HIMSTEDT.

*CANYON CITY, TEX.—We are officially advised that contract was let on Oct. 20 by the Aldermanic Board to H. A. CAMPBELL, of Amarillo, for the construction of sewer and water-works systems, at $25,803. Other bidders were: Ockander Bros., Dallas, Tex., $31,729; T. W. Moore & Son, Herford, Tex., $29,548; F. H. Lancashire, Dallas, $32,275; Reese Peters, San Antonio, Tex., $30,071; Kress Construction Co., Nowata, Okla., $31,359; J. Jaeger, Kansas City, Mo., $28,601; Collins Bros., Houston, Tex., $37,413. E. L. Dalton, Dallas, is Engr.

ALVA, OKLA.—See item under Streets and Roads.

KINGFISHER, OKLA.—Contract for constructing sanitary sewers, bids opened on Oct. 15, has been awarded by the city to T. W. ROBERTS, of Chickasha, at $10,605. Edward Price is City Clk.

TONKAWA, OKLA.—WHIPPLE & HEYDE, Tonkawa, have been awarded contract at $5,700 for the construction of sanitary sewers in District No. 2. Bids were opened on Oct. 21.

MADILL, OKLA.—The city has voted $20,000 of bonds for sewer construction.

OKLAHOMA CITY, OKLA.—Bids are asked by Bob Parman, City Clk., until Nov. 8 for the construction of the Broadway storm sewer from the intersection of 16th St. and Broadway to 30th St., 50 ft. north of section line, and Walker Ave. storm sewer, consisting of two branches, one at the intersection of 20th St. and Ollie Ave., and the other at the intersection of 22d St. and Ollie Ave.

The following bids were opened on Oct. 18 by the City Council for the construction of sewers in the district between Grand and California Aves.: J. O. Severn, $7,800; Stokes & McCreedie, $6,800; Bouse & Bouse, $10,400; F. R. Stone, $9,850; H. B. Derr, $6,976.

FORT WARD (Port Blakeley post-office), WASH.—Bids are asked until 11 a. m., Nov. 15, by Capt. E. C. Long, Constructing Q. M., U. S. A., Arcade Annex, Seattle, for the construction of a sewer system here.

PORTLAND, ORE.—S. A. Cobb, Engr. of Sewers and Bridges, is preparing plans for the construction of sewers for the Peninsula District. Estimated cost, about $1,000,000. Contract will probably be let in the spring.

EUREKA, UTAH.—TIBBY & JORDAN, Salt Lake City, Utah, have been awarded contract at $6,932, for constructing a sewer system for this city, the work including the following: 3,000 cu. yds. of earth excavation, 50 cu. yds. of rock excavation, 6,450 lin. ft. of 8-in. vitrified pipe sewer, 40 cu. yds. of concrete masonry, 80 cu. yds. of brick masonry.

HULL, QUE.—Contract for the construction of the main sewer here has been awarded to G. F. MARTIN, of Smith's Falls, at $38,697.

DUNNVILLE, ONT.—Bids will be received until 8 p. m., Nov. 18, by J. W. Holmes, Town Clk., for constructing a system of sanitary sewers, comprising about 18,000 lin. ft. of tile sewers, the contractor to furnish all materials. Willis Chipman, 103 Bay St., Toronto, Ont., is Engr.

GARBAGE DISPOSAL.

NEW YORK, N. Y.—Bids are asked by the Board of Health, until 10 a. m., Nov. 11, for furnishing all the labor and furnishing all the materials necessary or required for the removal of night soil, offal and dead animals from the City of New York, all boroughs, during the years 1910, 1911, 1912, 1913 and 1914, contract to be awarded as a whole, or by each borough separately, as the Board may decide is for the best interests of the city. Thomas Darlington, M. D., is Pres.

JERSEY CITY, N. J.—Bids have been received as follows by the Street and Water Board for the removal of ashes and garbage for a period of one year beginning Dec. 1: Henry Byrnes, $48,200; Harrington Co., $46,950.

RACINE, WIS.—The Board of Health has adopted a resolution looking to the construction of a garbage crematory.

OKLAHOMA CITY, OKLA.—The question of constructing a garbage incinerator is under consideration here, it is reported.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—The following bids were received on Oct. 22 for (a) paving South Market St. and (b) Corbet St.: Joseph B. O'Rourke & Co., (a) $12,353; Fred S. & A. D. Gore Co., Old South Bldg., (a) $13,776; William J. Rafferty & Co., 56 Dorchester Ave., (a) $14,367, (b) $5,473, and James Doherty, (b) $5,473.

PROVIDENCE, R. I.—We are officially advised that bids were received on Oct. 27 by the State Board Public Roads, Providence, for constructing State highways in the following towns: Burrillville, 36,900 ft.; Middletown, 10,560 ft.; Westerly, West Greenwich, Exeter, Tiverton, 5,280 ft., respectively. John H. Edwards is Chn. The contracts have been let as follows: Burrillville, AMOS D. BRIDGE'S SONS, Hazardville, Conn., labor, 17 cts. per hour; double team, 44 cts. per hour. Middletown, WALTER S. BARKER, Middletown, R. I., labor 22 cts. per hour; double team, 55 cts. per hour. Westerly, JOHN BRISTOW, Narragansett Pier, R. I., $3,683. West Greenwich, ROWE CONTRACTING CO., Brighton, Mass., $3,281. Exeter, ROWE CONTRACTING CO., Brighton, Mass., $3,286. Tiverton, L. H. CALLAN, Bristol, R. I., $3,925.

HARTFORD, CONN.—Contracts for the construction of state road work, bids for which were received by the State Highway Commissioner Oct. 29, have been awarded as follows: Town of Bethlehem, 7,587 lin. ft. graded-telford road, including one 12-in., six 18-in., one 15-in., two 24-in. and one 20-in. tile culverts, to EDWARD TRACY, Derby, Conn., $5,875 for grading, 65 cts. per lin. ft. for telford, 45 cts. per sq. yd. for cobble gutters, 74 cts. per lin. ft. for rubble drain, 50 cts. per lin. ft. for railing. Other bidders were, A. Brazos & Sons, Middletown, Conn., $7,300, 50 cts., 50 cts., 80 cts., 50 cts.; C. W. Tryon, Meriden, Conn., $9,863, $1.75, 65 cts., $1 and 60 cts.; G. J. Cellilli, Springfield, Mass., $9,863.10, $2.98, 96 cts., 97 cts., 79 cts.; B. D. Pierce, Jr., Co., Bridgeport, Ct., $11,404.63, $2.26, 65 cts., 75 cts., 75 cts. Town of Goshen, 2,600 lin. ft. graded-telford road, including one 15-in. and two 24-in. tile culverts, to JOSEPH MASCETTI, Torrington, Conn., $2,470 for grading, 60 cts. per lin. ft. for telford. Other bidders were, A. Brazos & Sons, Middletown, Conn., $3,990 and 50 cts.; G. J. Cellilli, Springfield, Mass., $8,294 and $2.49; John De Michael & Bro., Torrington, Conn., $3,900 and $1. Same town, 3,350 lin. ft. graded-telford road, to GOODMAN & TRUMBULL, Litchfield, Conn., $2,768 for grading and $150 per lin. ft. for telford. Other bidders were, A. Brazos & Sons, Middletown, $4,300 and 50 cts.; G. J. Cellilli, Springfield, Mass., $11,400 and $2.69; John de Michael & Bro., Torrington, $5,300 and $1; Joseph Mascetti, Torrington $2,847.50 and 60 cts.

*NEW YORK, N. Y.—Bids are asked by the Board of Water Supply, 299 Broadway, until 11 a. m., Nov. 18, for Contract No. 59, for the construction of about 27.5 miles of highways, including clearing, grading, building of culverts, ditches, drains, guard rails and retaining walls, around the Ashokan Reservoir, in the towns of Olive, Marbletown, Hurley, Woodstock and Kingston, Ulster County, N. Y. J. Waldo Smith is Ch. Engr.

The bids were received on Oct. 28 by the Park Board for regulating, grading and paving or repaving with asphalt pavement on a concrete foundation the roadway of Parkside Ave., between Flatbush Ave. and Park Circle, Bor. of Brooklyn, together with all work incidental thereto: Brooklyn Alcatraz Paving Co., 407 Hamilton Ave., Brooklyn, $28,813; Barber Asphalt Paving Co., 50 Church St., New York, $32,480; Cranford Co., 59 Ninth St., Brooklyn, $31,077; Uvalde Asphalt Paving Co., 1 Broadway, New York, $38,966.

Bids were received as follows on Oct. 26 by John F. Ahearn, Pres. Boro. of Manhattan, for regulating and repaving with wood block pavement on a concrete foundation the roadway of Delancey St., from 58 ft. east of the east curb line of Essex St. to 84 ft. west of the west curb of Chrystie St.: U. S. Wood Preserving Co., 165 Broadway, New York, $55,493; Barber Asphalt Paving Co., 50 Church St., $59,634; Republic Construction Co., $55,826.

Bids were received as follows on Oct. 28 by Allen N. Spooner, Comr. of Docks and Ferries, for furnishing all the labor and materials required for taking up the temporary pavement and laying a permanent pavement with granite paving blocks on a concrete foundation on Marginal St., between West 22d and West 23d St., North River, Boro. of Manhattan: Asphalt Construction Co., Madison Ave. and 137th St., $38,750; Dunbar Contracting Co., $38,788; Atlanta Contracting Co., 230 East 42d St., New York, $51,000; W. J. Fitzgerald, $42,316; Matthew Beard Contracting Co., $41,900.

NEW YORK, N. Y.—Contracts for regulating and repairing various streets in the Borough of Richmond, for which bids were opened Oct. 26, were awarded by George Cromwell, Pres. of the Boro., as follows: For furnishing all the labor and materials required for regulating and repaving with vitrified brick pavement on a concrete foundation the roadways of Bond St., from Heberton to Jewett Aves., and other streets, together with all work incidental thereto, to DOMINICK BONACCI, 672 Degraw St., Brooklyn, $48,191; the gutters of Barker St., from Trinity Pl. to Castleton Ave., and other streets, together with all work incidental thereto, to DOMINICK BONACCI, $21,264; the gutters of Henderson Ave., from Clinton to Lafayette Aves., and other streets, to DOMINICK BONACCI, $17,725; the gutters of Bay Ave., from Richmond Terrace to the railroad crossing and other streets, together with all work incidental thereto, to WILLIAM LONDINO, Brooklyn, $25,980; the roadway of Morningstar Road, from Richmond Terrace to the southerly side of Sherman Ave., together with all work incidental thereto, to DOMINICK BONACCI, $22,405; for furnishing all the labor and materials required for regulating and repaving with granite block pavement on a concrete foundation the roadway of Hyatt St., from Central Ave. to Stuyvesant Pl., together with all work incidental thereto, to ATLANTA CONTRACTING CO., 230 East 42d St., New York, $5,103.05.

Plans have been completed and bids authorized for improvements on Jackson Ave., Boro. of Queens, the main highway to Flushing, Malba, Whitestone and the important residential sections in the northern part of Queens. From the Queensboro Bridge Plaza to Bowery Bay Road, through Woodside, a distance of about 1¼ miles, the avenue will be repaved. From Bowery Bay Road to Trains Meadow Road the avenue will be raised from ten to fifteen ft. to official grade. When these improvements have been completed Jackson Ave. will afford a level highway. Lawrence Gresser is Pres. Boro. of Queens.

NEW YORK, N. Y.—The following bids were received on Oct. 26 by George Cromwell, Pres. Boro. of Richmond, for regulating and repaving with vitrified brick pavement on a concrete foundation the roadway of the following streets and avenues, together with work incidental thereto: Bond St., from Herberton to Jewett Aves., and other streets: John J. Donovan, 117 West 26th St., New York, $52,325; Joseph L. Sigrette, $49,500.-02; Joseph Johnson & Sons, $48,286.50; Asphalt Construction Co., Madison Ave. and 137th St., $54,647; D. Bennacci, 627 Degraw St., Brooklyn, $48,191; Charles Meade Sons Co., $59,128; Atlanta Contracting Co., 230 East 42d St., New York, $55,250; William Lendine.

Barker St., from Trinity Pl. to Castleton Ave., and other streets; John E. Donovan, 117 West 26th St., New York, $23,443; Joseph L. Sigrette, $21,534; Joseph Johnson & Sons, $21,675; D. Bonacci, $21,264; Atlanta Contracting Co., 230 East 42d St., New York, $25,439.

Henderson Ave., from Clinton to Lafayette Aves., and other streets: John E. Donovan, 117 West 26th St., New York, $19,547; Joseph L. Sigrette, $17,965; Joseph Johnson & Sons, $18,106; D. Bonacci, $17,725; Atlanta Contracting Co., 230 East 42d St., New York, $21,181.

The following bids were received on Oct. 26 by John F. Ahearn, Pres. Boro. of Mahanttan, for regulating and paving with asphalt block pavement on a concrete foundation the roadway of 207th St., from Ninth to Tenth Aves.: Barber Asphalt Paving Co., 30 Church St., New York, $11,702; Harlem Contracting Co., 2 Rector St., New York, $11,556.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Nov. 17, for regulating, grading and paving various streets in Brooklyn.

BUFFALO, N. Y.—Bids were received recently by the Board of Public Works for repaving Best St., 6,033 sq. yds., and widening, 3,970 sq. yds. The bids submitted were as follows: (Bids are on concrete base unless otherwise stated). Henry P. Burgard Co., 275 Lathrop St., Medina sandstone, $38,000, shale brick, $32,500, or asphalt, $29,000; Frank V. E. Bardol, Morgan Bldg., fire clay brick, $36,000, or macadam base, $36,000; German Rock, Asphalt & Cement Co., Ltd., Morgan Bldg., asphalt, $30,423; Barber Asphalt Paving Co., 882 Ellicott Sq., Trinidad or Bermudez Lake asphalt, $30,600. Repaving 1,587 sq. yds. on Trenton Ave. concrete base unless otherwies stated). German Rock, A. & C. Co., Medina sandstone, $7,109, asphalt, $5,237; Frank V. E. Bardol, shale brick, $6,000, macadam base, $6,000; Barber Asphalt Paving Co., Trinidad or Bermudez Lake asphalt, $5,070; Henry P. Burgard Co., asphalt, $5,500.

FLEMINGTON, N. J.—Bids will be received by the Board of Chosen Freeholders until Nov. 16 for building improved roads in Hunterdon County. Grant Davis is County Engr., Whitehouse Station, N. J. John W. Sharp is Dir.

JERSEY CITY, N. J.—Bids will be received until 4 p. m., Nov. 9, by the Joint Committee Boards of Chosen Freeholders, Counties of Essex and Hudson, at Jersey City, for widening and improving the Newark Plank Road, between Hackensack and Passaic Rivers. Walter O'Mara is Clk. of Hudson County Board of Chosen Freeholders, Jersey City.

The old Plank Road between Newark and Jersey City is to give way to a new road that will be 100 ft. wide and constructed with a view to accommodate all kinds of traffic. The present road is 29 ft. in width. Instead of being planked, the new road will be paved either with granite, wood blocks or Medina sandstone. It will be so laid out that there will be walks on either side for foot traffic, separate roads for trolley cars and wagons, and in the middle there will likely be a section for automobiles. James Owens, Newark, is Engr. of Essex County. Estimated cost, $800,000.

APOLLO, PA.—Bids will be received until Nov. 8 by the Town Council for grading, curbing and paving North Second St. Edwin L. Devey is Clerk.

HARRISBURG, PA.—The following bids were received on Oct. 21 for grading 17th St., from Berryhill St. to the Philadelphia & Reading Ry.: United Ice & Coal Co., Cowden and Forster Sts., Harrisburg, $4,450; Stucker Bros. Construction Co., $8,490; Central Construction & Supply Co., $8,550, and J. N. Bastress & Co., $11,570.

PITTSBURG, PA.—Bids are asked by J. M. Morin, Dir. Dept. of Public Safety, until noon, Nov. 11, for asphalt pavements and driveways around Engine House No. 39, corner of Steuben St. and Lorenz Ave. (new) 19th, Pittsburg, Pa. W. A. Magee is Mayor.

BALTIMORE, MD.—PATRICK FLANAGAN, Lexington and Calvert Sts., has secured the contract for paving a portion of Bellview Ave., at $13,086.

ROANOKE, VA.—A bond issue of $800,000 is proposed for street and sewer improvements and municipal buildings. Fifteenth Ave. is to be paved with granitoid. W. B. Bates is City Engr.

LENOIR, N. C.—The Lenoir & Blowing Rock Turnpike Co. will commence survey of a macadam road from Lenoir to Blowing Rock, 25 miles, to cost about $125,000. After the first ten miles are surveyed bids will be asked and contracts let. R. L. Gwyn, Lenoir, Secy.-Treas.; C. M. Miller, Salisbury, N. C., Eng.-in-Charge.

ATLANTA, GA.—The Street Committee has awarded contract, at $2.440 per sq. yd., to THORNTON & MAYSON, of Atlanta, for paving Marietta St., from Peachtree to Spring Sts., with wood block.

ST. AUGUSTINE, FLA.—The city will expend $10,000 for pavements and repairing streets.

BRISTOL, TENN.—Bids will be received until 1 p. m., Nov. 15 (readvertisement), it is reported, by the County Road Commissioners at Bristol for grading and macadamizing about 60 miles of road in Sullivan County. F. G. Phillips is County Engr.

*PADUCAH, KY.—Bids are asked until 3.30 p. m., Nov. 23, by the Board of Public Works for constructing 96,500 sq. ft. concrete sidewalks, 17,620 lin. ft. granite curbing, 17,620 lin. ft. concrete gutter, 7,250 sq. ft. concrete driveways, 1,700 lin. ft. c.-i. drain pipe. Work to be commenced as early in the spring of 1910 as weather will permit and completed on or before Oct. 1, 1910. L. A. Washington is City Engr.

BUCYRUS, OHIO.—Bids are asked until noon, Nov. 5, by the Board of Public Service for improving East Alley, from Galen to Mary Sts., by paving with paving brick, Trinidad pitch, lake sheet asphalt, bitulithic or bituminous macadam, or asphalt block, together with necessary grading, curbing, gutters, crosswalks, drainage, etc. F. L. Niederheiser is City Engr.

OAKWOOD, OHIO.—Bids will be received until Nov. 8 by the Village Council at the office of the Dayton Fiber Plaster Co., Dayton, Ohio, for furnishing material, constructing combined, cement curb and gutter, grading and graveling Dixon St., Oakwood.

LORAIN, OHIO.—The contract for the macadamizing East 29th St., from Vine Ave. to Fulton Road, and Fulton Road, from East 28th to East 29th Sts., has been awarded to the OHIO ENGINEERING CO. by the Board of Service. There was one other bidder for the work, but his bid exceeded the bid of the Ohio Engineering Co. by about $2,300. The successful figures for the work were $5,437.

ATHENS, OHIO.—Bids are asked by the Village Council until noon, Nov. 8, for grading, draining, curbing and paving Woodward Ave., from the east curb line of Congress St. to the north line of Inlot 1970 in said village, with brick or block. W. B. Golden is Clerk.

CLEVELAND, OHIO.—We are officially advised that bids were received by E. H. McIntosh, Secy. Bd. of Public Service, City Hall, on Oct. 27, for (a) grading, draining, curbing and paving with common Medina stone and improving East 49th St., from the L. S. & M. S. Ry. to about 490 ft. northerly. Also for (b) paving, draining, curbing, paving with 5-in. paving brick and improving East 86th St., from a point 1,179 ft. northerly from Euclid Ave. to a point about 1,319 ft. northerly from Euclid Ave. The following contracts have been awarded: (a) R. P. BURNETT, Society for Savings Bldg., Cleveland, at $5,129; (b) ROEHL BROS., Union Bank Bldg., Cleveland, at $629.

FORT BENJAMIN HARRISON (Lawrence post-office), IND.—Bids are asked by Capt. James V. Heidt, Constr. Q. M., until 2 p. m., Nov. 8, for constructing a gravel road, about 960 ft. long.

LANSING, MICH.—The City Council has under consideration the question of paving Chestnut St., from Main to Robert St., at a cost of $10,320. The work probably will be done next summer. H. A. Collar is City Engr.

NORTH CHICAGO, ILL.—Bids are asked until 11 a. m., Nov. 27, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing roads and walks at the U. S. Naval Training Station, Great Lakes, North Chicago. Specifications are on file at the office of Engineering News, New York.

MOLINE, ILL.—A joint contract for paving with brick of 15½ St., between Tenth and Twelfth Aves., and Twelfth St., between Twelfth and 14th Aves., has been awarded by the Board of Local Improvements to the McCARTHY IMPROVEMENT CO., of Davenport, Iowa.

CARBONDALE, ILL.—A. F. FRANKS, of Jacksonville, Ill., has secured the contract for 14,635 sq. yds. of paving in Districts Nos. 2 and 3 and Oak St., for $34,660. Other bidders were Hoeffken Bros., of Belleville, Ill., $35,812; Hoffman & Townsend, of Marion, $35,156, and Mourpin & Curdie, of Alton, $35,051.

HUNTINGTON, ILL.—Bids are asked by the Common Council until 7.30 p. m., Nov. 9, for improving Center St., from Superior to State Sts. J. B. Vernon is City Engr.

MILWAUKEE, WIS.—The Board of Public Works awarded paving contracts as follows: To J. B. ROBBINS, Minneapolis, Minn., creosoted wood block paving on North Ave., from Humboldt Ave. to Seventh St., approximately 27,575 sq. yds., at $2.81½, or $77,981. To BADGER CONSTRUCTION CO., Railway Exchange, Milwaukee, asphalt paving on Sycamore St., from West Water to Third Sts., at $2.50. To R. J. HICKEY, Milwaukee, creosote wood block pavement on Eleventh St., from Cedar to State Sts., $2.58. To HASE & WEIHER, Milwaukee, brick pavement on First Ave., from Greenfield Ave. to Mitchell St., $1.82½.

ST. PAUL, MINN.—The lowest bid received by the Board of Public Works for grading Snelling Ave., from Randolph to Seventh St., exceeds 25% of the assessed valuation by about $5,000, and was therefore rejected. The engineer's estimate was $22,402, and the lowest bide was that of O'Neil & Preston for $21,490. The valuation of the property to be assessed for this improvement is about $72,000. The reason for the very high cost of this improvement is that the hill from Seventh to Magoffin Sts. will have to be macadamized to prevent washing out. L. W. Rundlett is City Engr.

KANSAS CITY, KAN.—Bids will be received until Nov. 8 by the County Clerk for macadamizing the Kaw Kaw Valley Road a distance of 3½ miles.

LINCOLN, NEB.—Bids were opened in the office of the County Clerk recently for the grading of Lincoln Park Boulevard from South St. to Salt Creek. About 21,000 yds. of earth are to be moved. The lowest bidder was L. L. Young, at 13½ cts. per yard. The other bidders were C. E. Barney, 16 cts.; Robert Malone, 20 cts.; McGerr & Morrissey, 15 cts.; F. Walworth, 17 cts.

PINE BLUFF, ARK.—All bids received on Oct. 16 for 32,000 sq. yds. of pavement for District 26 have been rejected, and it is not known yet when new bids will be received. The following are the bids opened on Oct. 16 (price given per sq. yd.): (a) vitrified brick block, asphalt filler, 5-in. foundation; (b) vitrified brick on 4-in. foundation; (c) bitulithic, 2-in. wearing surface, 4-in. base; (d) bitulithic, 5-in. base; (e) creosoted wood block, 4-in. concrete base; (f) creosoted wood block, 5-in. base: W. R. Petty, Pine Bluff, Ark., (a) $2.28, (b) $2.15, (c) $2.15, (d) $2.26, (e) $2.12½, (f) $2.25; J. G. Ma-

gas, Texarkana, Tex., (a) $2.23, (b) $2.18, (c) $2.27, (f) $2.31; Hot Springs Concrete Co., Hot Springs, Ark., (b) $2.06¾, (e) $2.24½; Lane & Mitchell, Pine Bluff, Ark., (a) $2.23, (b) $2.03; Southern Bitulithic Co., Nashville, Tenn., (a) $2.28, (b) $2.25, (c) $1.98, (d) $2.08; E. J. Wetterstrom, Chicago, Ill., (e) $2.25 and $2.14, (f) $2.37 and $2.24; C. H. Foley, Pine Bluff, Ark., (e) $2.43, (f) $2.52. E. Hall is City Engr.

ALVA, OKLA.—Bids are asked until Nov. 12, for about one mile of asphalt pavement and for a storm sewer. A. K. Hubbard is City Recdr.

SAPULPA, OKLA.—Specifications are being completed and contract will soon be let for about 60,000 sq. yds. of sheet asphalt pavement. E. D. Kirkpatrick is City Engr.

OKLAHOMA CITY, OKLA.—W. A. Burke, City Engr., has completed plans for the pavement of South Walker St., from Reno to Oak Sts., about ¾ of a mile, to cost about $70,000.

DENVER, COLO. Concrete sidewalks will be constructed on Sixth, Seventh and Eighth Aves., between York and Clayton Sts. Contracts for the work have been awarded to the MUNICIPAL CONSTRUCTION CO. Its bid was $24,982.

Bids will be received until Nov. 10 by the Board of Public Works for furnishing material for grading and parking, roadway and sidewalk areas, paving the roadway areas, constructing concrete curb and guttering and otherwise improving Montclair Parkway Suburban Improvement District No. 1. J. B. Hunter is Pres. Bd. Pub. Works, pro tem.

SAGUACHE, COLO.—Bids will be received by Charles W. Comstock, State Engr., Denver, until Nov. 6 for the construction and repair of wagon road from the county line north to Saguache.

MONTESANO, WASH.—It is reported that a contract has been let to G. L. SIMMONS to gravel the county road from Bishop's Mill to the ferry landing opposite Wynooche, with Wynooche River gravel, at 75 cts. per yd.

MARSHFIELD, ORE.—The contract for paving North Front St., from the City Hall to Alder Ave., with bituminous rack paving has been awarded to the COOS BAY PAVING & CONSTRUCTION CO., for $5,368. A contract for the same kind of paving on Second St. South was awarded to the same firm for $2,853.

SAN BERNARDINO, CAL.—The City Council has awarded contracts for paving, amounting to $75,000, as follows: E. R. WERDIN & CO., of Los Angeles, for asphalting E and Fourth Sts.; to B. F. FORD CO., Copp Bldg., Los Angeles, asphalting D St.; to the JOHNSON-SHEA CO., Fourth St.; to the HIGHWAY CONSTRUCTION CO., Third and Fifth Sts.

MONTREAL, QUE.—The Montreal "Gazette" states that the cost of widening the fifth section of St. Antoine St., according to the report which has just been completed by the Expropriation Commissioners will be $219,270. The part to be widened is from Guy to Fulford Sts., and the holdings of 54 persons have been taken over in part by the city. The work has been in progress several years, as the city obtained authority from the Legislature to do the widening in sections by which the cost is spread over a longer period of time. The most prominent awards are as follows: Estate Rodier, $13,587; Estate A. Montrail, $36,130; Estate J. Gilmour, $18,092; Estate A. Biron, $23,000; Davis & Lawrence Co., $21,633; Charles Drummond, $14,574.

TORONTO, ONT.—C. H. Rust, City Engr., has estimated the cost of widening King St., from Simcoe to Spadina Ave., at $13,000, and has recommended to the Board of Control that the work be done next year.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

WILKINSONVILLE, MASS.—It is planned by the Army & Navy Duck Co. to erect a dyehouse, 100 × 40 ft. The stone portion of the building will be covered with a tier of brick, thus giving it the appearance of a brick structure. The company was incorporated in 1908, with a capital of $200,000, to engage in the manufacture of duck. Its plant is equipped with 1,500 twister spindles and 100 broad looms, and gives employment to about 100 hands. John H. Meyer is Pres.

NEW BEDFORD, MASS.—Plans have been drawn and work will begin at once, in the construction of the plant for the Apponegansett Co., to be located on Clark Point. The company is incorporated at $500,000.

HOLYOKE, MASS.—CASPER RANGER, Appleton and Bond Sts., Holyoke, has been awarded the contract for the erection of a 5-story brick addition to the American Pad & Paper Co.'s factory at the corner of Winter and Appleton Sts. The new addition will be placed on the Winter St. side, and the dimensions will be 100 × 60 ft. The cost will be about $35,000.

The negotiations between the Holyoke Water Power Co. and the Baker-Vawter Co., which have been in progress for some time, have been brought to a termination, and the Baker-Vawter Co. will remain in Holyoke. The contract for a $130,000 mill building, to be erected at the corner of Main and Berkshire Sts., was awarded to CASPER RANGER, Appleton and Bond Sts., Holyoke, and the building will be erected at once, the excavations for the site to start at once. The land for the building was bought from the Holyoke Water Power Co. The Baker-Vawter Co. is located in the Whitcomb Bldg. on Dwight St. The mill will be of brick, four stories in height, the dimensions being 325 × 70 ft.

FALL RIVER, MASS.—The management of the Bourne Mills has awarded to BEATTIE & WILCOX, 840 Bedford St., Fall River, the contract for an addition to the No. 1 Mill, 105 ft. long and 40 ft. wide and three stories in height. Preparatory machinery will be installed.

BURRILLVILLE (Harrisville post-office), R. I.—The William Pinkham Co. a woolen and worsted concern that had operated in the town for a number of years, but which sold out recently to the U. S. Worsted Co., was granted ten years' exemption from property taxation at a special meeting of the Burrillville taxpayers lately. The company agrees to expend $40,000 in the erection of the plant within the next 18 months. The plant, which will operate about 150 looms, will be occupied by the Glen Worsted and the Royal Worsted Companies, former tenants of the William Pinkham Co., in the old building.

NORTH TONAWANDA, N. Y.—We are officially advised that the DUROLITHIC CO., 400 Ellicott Sq., Buffalo, N. Y., has been awarded the contract for erecting a casing mill for the American District Steam Co., North Tonawanda, N. Y. The building will be 51 × 300 ft., with steam heating, plumbing, etc. Entire construction of reinforced concrete. Estimated cost, $40,000.

BUFFALO, N. Y.—The U. S. Headlight Co., E. H. Castle, Secy. and Mgr., Letchworth and Dart Sts., will build a power-house addition, 20 × 104 × 17 ft., of concrete construction and enlarge its machine shop at Letchworth St. and the New York Central R. R.

Robert J. Reidpath, Arch., 30 Builders Exchange, has completed plans and is receiving bids for a 2-story oil refinery building, 50 × 100 ft., of brick and structural steel construction to be erected at Gilbert St. and the Erie R. R. by the Cataract Refining & Mfg. Co., 912 Mutual Life Bldg. Approximate cost, $15,000.

The E. & B. Holmes Machinery Co. is to erect a 2-story brick addition, 50 × 60 ft., to the plant at Chicago and Miami Sts. Colson & Hudson, 35 Dun Bldg., are Archs.

UTICA, N. Y.—We are officially advised that the Utica Fine Yarn Co. has bought a plot of land adjoining the Foster Box Board Co.'s plant in West Utica, where it is proposed to build, as soon as possible, a mill to be occupied by the company which has just been formed. The lot is large enough to accommodate a 20,000 spindle mill, but only about one-half that number of looms will be installed at present. The company has options on adjoining land, where a 60,000-spindle mill can be built. It is reported that the capital stock of the company, $225,000, has all been pieced. A. K. Searls will have charge of the new mill, and Pardon B. Sanford will be Supt. All machinery has been purchased from the WHITIN MACHINE WORKS. The buildings will be 105 × 124 ft., fireproof, and will cost $40,000; equipment, $160,000. C. A. Makepeace & Co., Providence, R. I., are Archs.

SYRACUSE, N. Y.—Schneible & Co., Archs. and Engrs., Elk St., Buffalo, N. Y., have prepared plans for a 2-story and basement bottling plant, 52 × 160 ft., and storehouse, 63 × 66 ft., of brick and steel construction, to be erected on Butternut St. by the Haberle Brewing Co. Cost, $25,000.

NEW YORK, N. Y.—Goldner & Goldberg, Archs., Jackson and Westchester Aves., have been retained to prepare plans for a factory, fireproof, two stories, 62 × 110 ft., to be erected on Washington Ave., south of Tremont Ave., for Standard Damp Proofing & Roofing Co., 2652 Park Ave. New York. Flora Schreiber is Pres.; Mooney Schreiber, Secy.

NEW YORK, N. Y.—See items under Buildings.

JAMESTOWN, N. Y.—The Dahlstrom Metallic Door Co. has prepared plans for a 1-story brick addition to its factory, 60 × 120 ft., to be used as a paint shop. The contract has been let to SHELLBERG & LINDQUIST.

SCHENECTADY, N. Y.—The General Electric Co. has awarded a contract to the STONE & WEBSTER ENGINEERING CORPORATION, 147 Milk St., Boston, Mass., for erection of a building of concrete, steel reinforced, 400 ft. long, 80 ft. wide and five stories high. The McCLINTIC-MARSHALL CO., Park Bldg., Pittsburg, has been awarded a contract for the erection of an extension to Building No. 50. The extension is to be 200 ft. long, of concrete, steel reinforced.

PITTSBURG, PA.—The Westinghouse Electric & Mfg. Co. has awarded a contract to the DAWSON CONSTRUCTION CO., of Pittsburg, for the erection of two buildings. They will be erected at the eastern boundary of the East Pittsburg works. One, to be used for the construction and storage of catenary overhead trolley work, will be known as the catenary construction building. The other will be for the storage of scrap material, such as copper and steel filings, and will be known as the scrap house building. Both structures will be of steel, with corrugated iron roof and concrete walls. Work will begin immediately.

PHILADELPHIA, PA.—GEORGE KESSLER has a contract to build a 3-story factory, 34 × 85 ft., at 464-66 North Ninth St., for the Hellwig Silk Dyeing Co. to cost $17,000.

The American Pulley Co. will erect a 2-story factory, 50 × 120 ft., at southwest corner of 29th and Bristol Sts., to cost $12,000.

UNION BRIDGE, MD.—We are officially advised that the Tidewater Portland Cement Co., 115 Broadway, New York (plant located at Union Bridge, 45 miles from the city of Baltimore), has retained the Fuller Engineering Co., Allentown National Bank Bldg., Allentown, to design and construct a lime plant, to be built in connection with the Portland cement plant. The plans are now being prepared and construction work will commence on the plant immediately. The financing of the Tidewater Portland Cement Co. is in the hands of the Republic Finance Co., 115 Broadway, New York. It is expected that the cement plant will be in operation by the spring of 1911. Noted on Oct. 7.

DURHAM, N. C.—The Pearl Cotton Mills will build an additional structure and install looms for weaving wide sheetings. This building will be one story high 50 × 110 ft. The company inow has 10,356 ring spindles and 238 broad looms.

GREAT FALLS, S. C.—Press reports state that the Republic Cotton Mills, of Great Falls, S. C., will be organized with a capital stock of $600,000 for the purpose of building a cotton manufacturing plant and a mill village with improvements at Great Falls on the Catawba River. This company has purchased lands for a site and will begin to arrange for erecting buildings, etc., at once. It will erect a main building about 640 × 132 ft., two stories high, to contain the spinning machinery; and a 1-story weaving room about 132 × 140 ft.; also warehouses, operatives' cottages, school, church, store, auditorium, library, etc. About 15,000 HP. in electricity will be required for operating and lighting the plant and for lighting the mill village. The electricity will be obtained from the local lines of the Southern Power Co., which has its main offices at Charlotte, N. C. The textile equipment of the Republic Cotton Mills will include 25,600 spindles and 640 dobby looms, for the production of cotton cloth. Joseph E. Sirrine, of Greenville, S. C., is the Arch.-Engr.-in-Charge, and he will complete as soon as possible the plans and specifications, so that both building and machinery contracts can be awarded in time to ensure the completion of the plant during next summer. The company's officers are as follows: Robert S. Mebane, Pres., Graham, N. C.; Thomas B. Fuller, Vice-Pres., Durham, N. C.; Hal B. Mebane, Secy.-Treas., Graham, N. C.

MACON, GA.—The plant of the Central Georgia Brick Co., one mile out of the city on the Macon, Dublin & Savannah Ry., was destroyed by fire on Oct. 17. The loss to the owners will be $10,000 above the fire insurance. The value of the plant is placed at $25,000 and the buildings cover nearly a block. The owners are Dr. J. F. Farnham, J. Freeman Hart and Brad Wall. They will rebuild at once.

WINCHESTER, TENN.—The management of the Davis Hosiery Mills has awarded contract to T. S. MOODY, of Chattanooga, Tenn., for erection of the mill building at Winchester, Tenn. This will be a 2-story, 40 × 120-ft. structure with a 24 × 40-ft. L, costing $8,000. Noted on Oct. 7.

NASHVILLE, TENN.—The May Hosiery Mill, of Nashville, Tenn., has been incorporated with a capital stock of $60,000 by Jacob May, A. E. Martin, G. S. Andrews, T. C. Boyd and others. This company will erect buildings and install machinery for a daily output of 1,500 dozen pairs of children's hosiery. It will erect a 3-story, 65 × 50-ft. structure for the main mill and a 1-story warehouse containing 7,000 sq. ft. of floor space.

MILWAUKEE, WIS.—The Milwaukee Car Mfg. Co., Port Washington Road, has voted to build a $15,000 addition.

The construction of the 4-story shop factory for A. H. Weinbrenner Co., 523 Market St., on the old German Market site, has been authorized by the Building Inspector. The structure is to cost $225,000 and will be of fireproof material. The foundation is finished.

H. J. Esser, Arch., 82 Wisconsin St., has awarded contracts for a $40,000, 5-story, fireproof factory building for the Harsh & Edmonds Shoe Co., 694 Hanover St., at Maple and Hanover Sts., as follows: Mason, CONRAD RAULF, JR., CONSTRUCTION CO., Patton Bldg., Milwaukee; carpenter, F. LUENZMANN CONSTRUCTION CO., 192 Prairie St., Milwaukee.

H. Messmer & Son, Archs., 473 East Water St., Milwaukee, have awarded the general contract for a $22,000 machine shop, $1,000 boiler house and $2,000 office building for the Koehrang Machine Co. at 81st St. and Concordia Ave., to the CONRAD RAULF, JR., CONSTRUCTION CO., Patton Bldg., Milwaukee. It will be of reinforced-concrete construction.

EAU CLAIRE, WIS.—The Eau Claire Trunk Co. has purchased a building site bounded by Mill and Beach Sts. and First Ave., in the Ninth Ward, and plans to erect a $15,000 factory building next year. Probable dimensions, 100 × 80 ft., three stories high, of solid brick construction.

GRAND RAPIDS, MINN.—The Itasca Paper Co. will double the size of its mill. The additions to the plant, including land, will cost between $300,000 and $400,000, and employment will be given to from 140 to 200 additional workmen.

GRAND JUNCTION, COLO.—The Grand Junction & Grand River Valley Ry. Co. expects to let contracts during the next six months for constructing a car house. Headquarters, Colorado Springs, Colo.

PORTLAND, ORE.—The Portland General Electric Co. is planning to build a car house at Front and Shemeketa Sts., Portland. The building is estimated to cost $20,000.

BOISE BARRACKS (Boise post-office), IDAHO.—Bids are asked by the Constructing Q. M., Boise, until 2.30 p. m., Nov. 24, for constructing, plumbing, heating and electric wiring of one bakery and one set Hospital Corps Sergeants' quarters at Boise Barracks.

ST. JOHN, N. B.—F. C. Durant, of New York, N. Y., M. H. Day, of Montreal, Que., and others associated with them will erect a sugar refinery in St. John, to cost $2,000,000 and to employ at least 500 men. Mr. Durant and Mr. Day have interviewed the city government, the Board of Trade and others in reference to the matter. The city will grant a free site and exemption from taxes and water rates for a term of years.

QUEBEC, QUE.—The Quebec Railway, Light & Power Co. expects to place contracts early next year for the construction of a car house. E. A. Evans, Quebec, is Mgr.

VANCOUVER, B. C.—The British Columbia Electric Ry. Co. will let contracts within a few weeks for constructing an extension to its car house shops. R. H. Sperling is Mgr., Vancouver.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

WHARF. — Montgomery, Ala. — HUGGER BROS., Montgomery, have contract for city wharf, which will cost about $10,000.

WHARF.—Moncton, N. B.—Contract for the extension to the Moncton wharf has been awarded to OSCAR & WARREN DOWNEY, of Curreyville, N. B.

FILLING-IN.—Olympia, Wash.—Bids will be received until noon, Nov. 15, by G. R. Dever, City Clerk, for filling-in tide flats; estimated quantity, 380,000 cu. yds.

CEMENT.—New York, N. Y.—Bids will be received by the Department of Water Supply, Gas and Electricity until 2 p. m., Nov. 17, for furnishing and delivering cement.

*CHANNEL.—Baltimore, Md.—Bids are asked by Maj. W. E. Craighill, Corps Engrs., U. S. A., until 1 p. m., Nov. 30, for dredging in Chesapeake Bay, York Spit section of channel to Baltimore, Md.

EARTH FILL.—New York, N. Y.—Bids are asked until 3 p. m., Nov. 11, by the Department of Parks, for furnishing and delivering earth fill for the Colonial Garden in Van Cortlandt Park, in the Borough of the Bronx.

DAM.—Burleigh Falls, Ont.—Bids will be received by the Department of Railways and Canals, Ottawa, Ont., until 4 p. m., Nov. 16, for work connected with the construction of a concrete dam at Burleigh Falls, Ontario, on the Trent Canal.

EARTHWORK.—Erie, Kan.—Bids will be received until noon, Nov. 5, at the office of O. M. Johnson, County Clk., for constructing 70 sections of earthwork on the Allen extension of Rosenthal levee in Tioga Township; also a 25-ft. steel I-beam bridge in this levee.

MASONRY REPAIRS.—New York, N. Y.—Bids will be received by the Department of Bridges until 2 p. m., Nov. 18, for repair of granite masonry, Manhattan tower foundation of the Manhattan Bridge over the East River, between the Boroughs of Manhattan and Brooklyn.

SUBWAY.—Saskatoon, Sask.—Bids were received by J. H. Trusdale, City Clk., on Oct. 6 (an extension from Sept. 22) for the construction of a subway under tracks of the Canadian Northern Ry. in this city. George T. Clark is City Engr. The bids were returned unopened.

WATER-FRONT IMPROVEMENTS.—Oakland, Cal.—Plans for the proposed water-front improvement have been drawn by F. C. Turner, City Engr., in conjunction with a Board of Consulting Engineers. Nothing will be done further until after the election, at which the bond for this work will be voted on.

DITCH. — Oklahoma City, Okla. — The County Commissioners on Oct. 18 awarded to FORSTELL & FLYNN, of St. Paul, Minn., the contract for constructing a ditch in Drainage Dist. No. 1 from a point two miles southwest of Arcadia to the county line at Luther, about 779,000 cu. yds., at 9.47 cts. per cu. yd.

SEAWALL.—North Chicago, Ill.—Bids will be received until 11 a. m., Nov. 27, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing an inner basin sea wall at the Naval Training Station, Great Lakes, North Chicago. Specifications are on file at office of Engineering News, New York.

HARBOR WHARF.—New London, Conn.—MITCHELL & CO., 2 Stone St., New York, and not the Mitchell Co., 621 W. 24th St., New York, have been awarded contract by the Constructing Quartermaster, New London, for constructing inland harbor and wharf at Plum Island, Long Island Sound, at $55,000, as noted on Oct. 21.

*FIRE APPARATUS.—Washington, D. C.—Bids are asked by Maj. H. Gray Zalinski Q. M., Washington, D. C., until 10 a. m., Dec. 1, for furnishing fire apparatus at various posts of U. S. Army, consisting of 34 chemical fire engines, 11 gasoline fire engines, 1,881 fire extinguishers, 27,380 ft. of 2½-in. fire hose, hook and ladder trucks, etc.

STRUCTURES. — Montgomery, Ala. — Bids were received by Robert Tait, City Treas., on Oct. 18 for construction of warehouse platform and superstructure of incline railway for city wharf; also for concrete substructure, 300 cu. yds.; also furnishing and installing hoisting machinery. The contract has been let to HUGGER BROS., of Montgomery, at $6,594.

FIRE ENGINES, ETC.—New York, N. Y.—Bids were received by Nicholas J. Hayes, Fire Comr., on Oct. 15 for (a) furnishing and delivering two fourth-size steam fire engines, and for furnishing (b) and delivering three combination hook and ladder trucks and chemical engines. All bids for (a) have been rejected. Contract for (b) has been let to the COMBINATION LADDER CO., 32 Park Pl., at $3,896.

STEAMBOAT.—New York, N. Y.—The following bids were received on Oct. 26 by the Dept. of Corrections for furnishing all the labor and materials required for construction and completion of a 72-ft. single screw steamer: Waters, Gildersleve Colver Co., 45 Broadway, New York, $21,950; Columbia Engineering Works, $25,000; John F. Walsh, Jr., Co., 127 Charlton St., New York, $23,739; James Schewan & Son, $22,741. All bids have been rejected.

*LEVEE. DITCH.—Caldwell, Tex.—Bids were received by the Commissioners of Burleson County Improvement District No. 1, pursuant to conditions of Chapter 85, General Laws of Texas, 1909, on Oct. 20, at the office of the County Clerk, Caldwell, for the construction of approximately 28 miles of levees and four miles of drain ditch. (Preliminary estimate of quantities about 1,100,000 cu. yds., but subject to change). Bids were rejected and new bids were advertised for later. R. S. Newcome is Chn.

DRAINAGE CANAL.—Timberville, Miss.—Bids are asked until 8 a. m., Nov. 15, by Irwin F. Smith, Secy., Yallobasha Swampland District No. 1, for construction of a 12-mile drainage canal. There will be about 476,000 cu. yds. of excavation. The contractor is to furnish dredge, boat, with all implements and labor, etc., necessary for the excavation of the canal and the clearing of the right-of-way. Time allowed for the completion of the canal is limited. H. P. Farrar is Engr., Jackson, Miss.

•DITCH.—Monticello, Ill.—The Commissioners of Lake Fork Special Drainage District will receive bids for cleaning out and enlarging the main ditch of this drainage district at the office of the County Clerk, Monticello, Ill., until 10 a. m., Nov. 11. Length of ditch, 54,800 ft.; excavation, 578,052 cu. yds. W. J. Day, Engr., Bement, Ill.

DITCHES.—Estherville, Iowa.—Bids will be received by the Board of County Supervisors until noon, Nov. 8, for the construction of county ditches Nos. 52 and 44. Roy J. Ridley, County Audr.

DREDGING.—New York, N. Y.—The following bids were received on Oct. 28 by Allen N. Spooner, Comr. of Docks and Ferries, for furnishing all labor and materials required for dredging about 200,000 cu. yds. in the North River, Boro. of Manhattan: Henry Dubois Sons, 17 State St., New York, 14 cts. per cu. yd.; Morris & Cummings Co., 16 2/9 cts.; Newark Meadows Improvement Co., 21 cts.; Taylor Dredging Co., 21 State St., New York, 14 cts.; F. Sanford Ross, 18 cts.; International Contracting Co., 16 cts.

DRY-DOCK.—New York, N. Y.—Bids were received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., on Oct. 30, for completing Dry Dock No. 4, Navy Yard, New York, as follows: S. Pearson & Son, Inc., 507 Fifth Ave., New York. Item 1, $1,718,000; Item 2, $1,720,000; MacArthur Bros. Co., 11 Pine St., New York, Item 1, $1,975,000; alternate: Will undertake the work for actual cost plus a profit of 12½%; The Foundation Co., 115 Broadway, New York, Item 1, $1,760,183; Item 2, $1,775,183; Holbrook, Cabot & Rollins Corporation, 6 Beacon St., Boston, Mass., Item 1, $1,389,000; Item 2, $1,390,000.

BARGE CANAL.—Albany, N. Y.—Bids are asked by F. C. Stevens, Supt. Public Works, until noon, Dec. 1, on four additional Barge Canal contracts, as follows: Contract No. 36, providing for 16 winches for movable dams in the Mohawk River, at an estimated cost of $72,000; this work already has been twice advertised but without success. Contract No. 54, for constructing Lock No. 7 and its approaches in the Champlain Canal at Fort Edward; Engineer's estimate, $232,908. Contract No. 69, for constructing Lock No. 2 in the Hudson River below Mechanicville, with appertaining construction; Engineer's estimate, $270,675. Contract No. 72, for dredging a channel in the Hudson River and performing work incidental thereto from Lock No. 2 to Lock No. 4, a distance of four miles; Engineer's estimate, $1,439,733.

CONTRACT PRICES.

•AQUEDUCT.—New York, N. Y.—Bids were received on Oct. 20 by the Board of Water Supply for Contract 55, portions of Croton and Kensico Divisions, Catskill Aqueduct, including influent, effluent and aeration work at Kensico Reservoir. Bids were submitted by (A) RINEHART & DENNIS CO., Evans Bldg., Washington, D. C. (awarded contract); (B) MacArthur Bros. Co., 11 Pine St., New York; (C) George W. Jackson, Inc., 46 Wall St., New York; (D) M. A. Talbot Co. of Baltimore City, Maryland, 1110 American Bldg., Baltimore, Md.; (E) Bradley, Gaffney, Steers Co., 1 Madison Ave., New York; (F) United Engineering & Contracting Co., 17 W. 42d St., New York; (G) C. D. Smith & Co., Memphis, Tenn., and Hannan & Hickey, 4065 Delmar Ave., St. Louis, Mo.; (H) American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa.; (I) Pittsburg Contracting Co., Pittsburg, Pa., and The Dravo Contracting Co., Lewis Block, Pittsburg, Pa.; (J) average bid:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
144,000 cu. yds. removal of top soil	$0.50	$0.60	$0.45	$0.40	$0.40	$0.40	$0.50	$0.95	$0.40	$0.51
13,000 cu. yds. open-cut excavation, Sta. 384 to Sta. 391 + 50, Type A	1.00	.94	.75	.95	1.10	.85	.95	.95	1.10	.95½
35,000 cu. yds. open-cut excavation, Sta. 391 + 50 to Sta. 412, Type B	1.00	1.40	.85	1.20	.90	1.50	.95	.95	1.10	1.09½
34,000 cu. yds. open-cut excavation, Sta. 412 to Sta. 431, Type A	.80	1.10	.90	.95	.95	1.00	.95	.95	1.10	.97
38,000 cu. yds. open-cut excavation, Sta. 478 + 50 to Sta. 493, Type A	.80	1.10	.90	.85	.85	1.00	.95	.95	1.10	.94½
2,000 cu. yds. open-cut excavation, Sta. 545 + 30 to Sta. 546, Type A	1.00	1.44	.90	1.25	1.90	1.55	.95	.95	1.10	1.23
6,000 cu. yds. open-cut excavation, Sta. 553 + 85 to Sta. 555, Type B	1.00	.80	.90	.65	1.10	.70	.95	.95	1.10	.90½
19,000 cu. yds. open-cut excavation, Sta. 566 to Sta. 573, Type A	1.00	1.32	.90	1.00	.95	1.15	.95	.95	1.10	1.06½
14,000 cu. yds. open-cut excavation, Sta. 580 to Sta. 587 + 50, Type A	1.00	1.20	.90	1.10	.90	1.50	.95	.95	1.10	1.07
45,000 cu. yds. open-cut excavation, Sta. 587 + 50 to Sta. 619, Type B	1.00	1.10	.90	1.05	.85	1.30	.95	.95	1.10	1.02
73,000 cu. yds. open-cut excavation, Sta. 619 to Sta. 645, Type A	.80	.95	.90	.90	1.40	.60	.95	.95	1.10	.95
53,000 cu. yds. open-cut excavation, Sta. 645 to Sta. 652 + 50, Type A	.80	1.12	.90	.90	1.00	.70	.95	.95	1.10	.93½
62,000 cu. yds. open-cut excavation, Sta. 689 to Sta. 702, Type A	.80	1.00	.80	.80	.75	.80	.95	.95	1.10	.88
13,000 cu. yds. open-cut excavation, Sta. 704 + 50 to Sta. 719, Type A	.80	.90	.90	.95	.90	1.15	.95	.95	1.10	.95½
32,000 cu. yds. open-cut excavation, Sta. 719 to Sta. 749, Type B	.80	.90	.80	.95	.90	1.15	.95	.95	1.10	.94½
15,000 cu. yds. open-cut excavation, Sta. 749 to Sta. 764, Type A	.80	.70	.80	.70	.70	.70	.95	.95	1.10	.82
59,000 cu. yds. open-cut excavation, Sta. 764 to Sta. 821 + 50, Type B	.80	1.00	.80	.95	.90	1.25	.95	.95	1.10	.97
12,000 cu. yds. open-cut excavation, Sta. 838 to Sta. 842, Type A	.80	1.00	.80	1.25	1.50	1.30	.95	.95	1.10	1.07
19,000 cu. yds. open-cut excavation, Sta. 107 + 50 to Sta. 116 + 75, Type A	.80	1.30	.80	1.20	1.70	1.60	.95	.95	1.10	1.15½
13,000 cu. yds. open-cut excavation, Sta. 131 + 90 to Sta. 137 + 90, Type A	.80	1.30	.90	1.10	1.05	1.60	.95	.95	1.10	1.08
23,000 cu. yds. earth excavation from narrow trenches	.80	.85	.90	1.00	.90	.60	.75	1.00	.75	.84
234,000 cu. yds. earth excavation for chambers, inlet channel, aeration works, etc.	.50	.55	.60	.70	.70	.40	.60	.75	.60	.60
67,000 cu. yds. rock excavation	1.00	1.30	.90	1.80	1.50	1.60	1.45	2.00	1.75	1.48
11,000 cu. yds. refilling and embanking, Sta. 384 to Sta. 391 + 50	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
24,000 cu. yds. refilling and embanking, Sta. 391 + 50 to Sta. 412	.25	.25	.30	.30	.25	.35	.32½	.30	.25	.28½
21,000 cu. yds. refilling and embanking, Sta. 412 to Sta. 431	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
16,000 cu. yds. refilling and embanking, Sta. 478 + 50 to Sta. 493	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
1,000 cu. yds. refilling and embanking, Sta. 545 + 30 to Sta. 546	.25	.25	.30	.30	.25	.30	.32½	.30	.25	.28
2,000 cu. yds. refilling and embanking, sta. 553 + 85 to Sta. 555	.25	.25	.30	.30	.25	.30	.32½	.30	.25	.28
8,000 cu. yds. refilling and embanking, Sta. 566 to Sta. 573	.25	.25	.30	.30	.25	.30	.32½	.30	.25	.28
8,000 cu. yds. refilling and embanking, Sta. 580 to Sta. 587 + 50	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
40,000 cu. yds. refilling and embanking, Sta. 587 + 50 to Sta. 619	.25	.25	.30	.30	.25	.35	.32½	.30	.25	.28½
45,000 cu. yds. refilling and embanking, Sta. 619 to Sta. 645	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
16,000 cu. yds. refilling and embanking, Sta. 645 to Sta. 652 + 50	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
23,000 cu. yds. refilling and embanking, Sta. 689 to Sta. 702	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
14,000 cu. yds. refilling and embanking, Sta. 704 + 50 to Sta. 719	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
24,000 cu. yds. refilling and embanking, Sta. 719 to Sta. 749	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
12,000 cu. yds. refilling and embanking, Sta. 749 to Sta. 764	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
44,000 cu. yds. refilling and embanking, Sta. 764 to Sta. 821 + 50	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
2,000 cu. yds. refilling and embanking, Sta. 838 to Sta. 842	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
10,000 cu. yds. refilling and embanking, Sta. 107 + 50 to Sta. 116 + 75	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
7,000 cu. yds. refilling and embanking, Sta. 131 + 90 to Sta. 137 + 90	.25	.25	.30	.25	.25	.30	.32½	.30	.25	.27½
96,000 cu. yds. refilling and embanking deposited in layers	.30	.45	.45	.50	.55	.60	.47	.60	.50	.49
239,000 cu. yds. refilling and embanking deposited in bulk	.10	.25	.20	.25	.40	.30	.30	.50	.40	.30
92,000 cu. yds. surface dressing and grassing	.50	.40	.40	.50	.45	.60	.60	.50	.50	.49½
75,300 cu. yds. mass concrete in open cut and on embank., including influent weir	5.25	5.25	5.50	5.00	5.10	5.50	5.30	5.00	5.25	5.24
29,700 cu. yds. mass concrete for gate and screen-chambers and aeration works	5.00	5.50	5.50	5.50	7.00	6.00	5.50	7.30	6.00	5.92
6,300 cu. yds. mass concrete for works of sanitation, culverts, etc.	6.00	5.25	5.50	7.00	6.00	7.00	7.50	9.00	7.00	6.69½
37,800 cu. yds. reinforced concrete for by-pass aqueduct	5.75	7.00	5.75	7.00	7.25	10.00	7.25	7.00	8.00	7.22
17,400 cu. yds. reinforced concrete for effluent aque. Put. siph. and Vent. meters	5.75	7.25	5.75	7.00	7.75	10.00	8.00	7.00	8.00	7.39
5,000 cu. yds. reinforced concrete for gate and screen-chambers, etc.	8.00	7.25	6.25	12.00	8.00	11.50	8.00	11.00	8.00	8.89
200 cu. yds. rubble masonry and paving in mortar	4.50	4.90	4.50	5.00	4.50	5.00	5.50	4.00	5.00	4.77
3,000 cu. yds. dry rubble masonry and paving	4.00	4.00	4.00	4.00	4.00	2.00	4.50	3.00	4.00	3.72
2,200 cu. yds. riprap	2.00	1.45	2.00	2.00	1.80	1.00	3.00	2.00	2.00	1.92
10,500 cu. yds. rock excavation in Lakehurst tunnel	5.50	7.00	6.70	6.00	6.50	6.25	7.50	9.00	5.25	6.63
212,000 cu. yds. rock excavation in all tunnels except Lakehurst	5.00	4.70	5.90	5.00	6.00	5.50	5.50	6.00	6.50	5.57
1,000 sq. yds. additional trimming in tunnel in rock	5.00	3.45	4.50	5.00	2.00	5.00	2.50	5.00	3.00	3.94
2,000 cv yds. earth excavation in tunnel	5.00	3.00	4.00	5.25	4.00	6.00	5.00	5.00	6.00	4.81
500 cu yds. enlargement of permanently supported tunnel in earth and rock	8.00	8.00	7.00	12.00	5.00	12.00	8.00	10.00	12.00	9.11
100,000 lbs. furnishing structural steel roof support	.06	.03	.04	.05	.04	.06	.05	.04	.03	.04½
100,000 lbs. erecting structural steel roof support	.04	.03	.03	.02	.01½	.01½	.02	.02	.03	.02½
430 M. ft. B. M. permanent timbering in tunnel	60.00	60.00	60.00	60.00	60.00	60.00	65.00	60.00	60.00	60.56
100 M. ft. B. M. temporary timbering in tunnel	60.00	57.50	60.00	60.00	50.00	50.00	60.00	60.00	65.00	58.06
19,755 lin. ft. of tunnel drainage	1.00	1.00	1.50	1.00	1.00	1.00	1.50	2.00	.75	1.19
1,650 lin. ft. forms for masonry lining in Lakehurst tunnel	2.50	4.60	3.50	3.00	2.00	3.50	3.00	4.00	3.00	3.23
18,105 lin. ft. forms for masonry lining in all tunnels except Lakehurst	2.50	2.70	2.50	3.00	2.50	3.50	2.75	4.00	3.00	2.94
3,600 cu. yds. concrete masonry in Lakehurst tunnel	5.50	6.40	7.00	6.00	5.75	6.00	7.50	6.50	6.00	6.30
56,500 cu. yds. concrete masonry in all tunnels except Lakehurst	5.50	5.10	4.80	5.25	5.25	6.00	6.00	6.00	6.00	5.54
3,500 cu. yds. excess concrete masonry in tunnel	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
250 cu. yds. brick masonry in tunnel	20.00	17.00	14.00	20.00	20.00	20.00	15.00	15.00	15.00	17.33
10,000 cu. yds. dry packing	2.00	2.50	2.50	2.00	2.00	2.00	2.50	3.00	3.00	2.39
2 Venturi meter fittings	6,000.00	8,000.00	9,000.00	11,000.00	7,500.00	9,500.00	6,500.00	12,000.00	8,000.00	8,611.11
4,145,000 lbs. steel for reinforcing concrete	.04	.03	.03	.03	.03	.03 21/100	.04½	.03	.03½	.03¼
943,000 lbs. wrought iron, cast iron and steel	.05	.05	.06	.07	.06	.06	.08	.07	.05	.06
12,000 lbs. wrought-iron pipe and fittings	.08	.06	.07	.10	.07	.07	.08	.09	.04	.07¼
250 tons cast-iron pipe and special pipe castings	100.00	90.00	80.00	100.00	70.00	100.00	75.00	75.00	80.00	85.56
8 sluice-gates and gate-valves for permanent works	100.00	40.00	95.00	100.00	100.00	90.00	100.00	90.00	100.00	90.56
5 gates and valves, Class A, for works of sanitation	100.00	30.00	65.00	75.00	55.00	50.00	10.00	40.00	100.00	58.33
80 gates and valves, Class B, for works of sanitation	50.00	20.00	70.00	20.00	20.00	13.00	5.00	10.00	50.00	28.67
30 gates, valves and cocks, Class C, for works of sanitation	20.00	10.00	35.00	8.00	10.00	5.00	2.50	4.00	25.00	13.28
625,000 lbs. caring for and setting metal-work furnished by the city	.02	.01½	.04	.02	.02	.01½	.02½	.02	.02	.02
57,000 lbs. bronze	.70	.70	.70	.70	.70	.45	.65	.60	1.00	.69
43,000 lbs. galvanizing	.04	.06	.04	.05	.04	.08	.05	.05	.10	.05
3,000 lin. ft. steel pipe for grouting	.25	.20	.30	.50	.25	.20	.25	.30	.25	.28
223,800 bbls. Portland cement	1.60	1.60	1.55	1.70	1.50	1.70	1.65	1.55	1.70	1.62
1,000 cu. yds. grout of Portland cement	10.00	6.50	7.00	8.00	4.00	6.00	4.50	10.00	5.00	6.78
6,000 cu. yds. sand, gravel and broken stone	2.00	1.50	1.60	2.00	1.75	2.00	2.50	2.00	1.50	1.87
1,500 cu. yds. Telford base	2.00	2.00	6.00	2.00	3.00	2.00	2.00	2.00	2.50	2.68
8,000 cu. yds. surfacing macadam roads	3.00	1.75	3.00	2.50	3.25	3.00	2.75	3.00	4.00	2.92
4,000 cu. yds. surfacing gravel roads and paths	3.00	2.00	3.00	2.00	2.75	1.50	2.25	2.00	4.00	2.50
10 testing portions of aqueduct	1,000.00	2,000.00	800.00	700.00	750.00	1,000.00	750.00	500.00	500.00	888.89
2,500 lin. ft. testing portions of aqueduct exceeding 200 ft. in length	2.00	2.00	2.00	2.50	2.00	2.00	2.00	2.00	2.00	2.06
40,000 lin. ft. stone boundary walls	1.00	1.25	.85	.90	1.00	1.00	1.50	.75	2.00	1.14
16,000 lin.ft. wooden fences and guard-rails	.40	.25	.40	.40	.30	.25	.60	.30	.40	.37
6,000 lin. ft. boundary wire fences	.40	.25	.40	.60	.30	.45	.40	.50	.40	.41
30,000 lin. ft. man-proof fence	.60	.30	.60	.80	.60	.60	.50	.30	.40	.52
30,000 lin. ft. tile pipe, 6 ins. and less in diameter	.60	.50	.80	.40	.40	.25	.35	.40	.30	.44½
2,200 lin. ft. tile pipe, 8 to 12 ins., inclusive, in diameter	1.00	.85	1.10	.70	.80	.70	.70	.75	.60	.80
2,600 lin. ft. tile pipe, larger than 12" and not exceeding 18" diameter	1.50	1.25	1.40	1.00	1.00	1.25	1.25	2.00	.75	1.27
2,300 lin. ft. electrical conduits	1.00	.12	.35	.75	.15	.20	.20	.50	.30	.39½
300 M. ft. B. M. timber and lumber net in tunnel	50.00	45.00	55.00	55.00	50.00	60.00	60.00	50.00	55.00	53.33
700 lin. ft. drilling holes in rock or masonry	.30	.40	.30	.75	.50	1.00	1.00	1.00	.25	.61
Crossing tracks of Putnam division of N. Y. C. & H. R. R. R. (lump sum)	6,000.00	6,500.00	3,000.00	5,000.00	6,000.00	10,000.00	6,000.00	9,500.00	10,000.00	6,888.89
2,000 lin. ft. sinking wells	6.00	2.00	1.20	7.00	7.25	10.00	3.00	4.00	2.00	4.72
25,000 mil. ft. gal. pumping for village water-supply	.50	.50	.45	.60	.60	.30	4.00	.60	.50	.80¼
Cleaning up (lump sum)	5,000.00	2,000.00	6,000.00	5,000.00	7,500.00	5,000.00	5,000.00	5,000.00	10,000.00	5,611.11
Total	$4,545,487	$4,691,339	$4,761,010	$4,854,170	$5,044,652	$5,195,782	$5,199,076	$5,347,960	$5,405,481	

Bond required, $600,000. Time, 54 months.

FOREIGN CONTRACTS.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ———, ———. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

COMPETITIVE PLANS.—Argentina.—Competitive plans and estimates from all parts of the world will be received at the Department of Public Instruction, Buenos Aires, until Dec. 10, for the construction of a building for the Jose de San Martin Polyclinic, the capital invested in the building to bear 5% interest annually. The plans and estimates will be submitted to an advisory committee, and decision rendered within 30 days from the aforesaid date. The bids must be made in accordance with the law of public works of July 20, 1876, and the regulations relating thereto. The following documents must be submitted: (a) The general plan, showing the situation of all the buildings and dependencies in the scale of 0.005 per meter. (b) The partial plans of each floor of the buildings planned as an integral part of the polyclinic in the scale of 0.01 per meter. (c) Longitudinal and cross-sections of each building in the scale of 0.01 meter. (d) The front of the main buildings and pavilions in the scale of 0.01 per meter. (e) A bird's-eye view of the whole, which shall be 1 meter long at its greatest length. (f) A detailed description and a general estimate. (g) A financial bid as to the best manner of carrying out the work, stating clearly the solid guaranties it affords. This bid shall not be compulsory, and may be limited to the mere presentation of the other documents. The building shall not have more than two floors and a basement, and must correspond to the system of detached institutes, 24 in number, with a capacity of 60 beds each. The author of the plan selected shall have charge of the preparation of the final plans and the technical supervision of the work under the supervision of the advisory committee, and shall receive 5% of the price of the building proper. The second and third best plans shall be entitled to prizes of 10,000 pesos ($4,400) and 5,000 pesos ($2,200), respectively. The plans for which prizes are awarded become the property of the Government, as well as the plans submitted that are not claimed within six months from the date of the award. All communications regarding the matter should be addressed to the "Advisory Committee, 430 Viamonte St., Buenos Aires, Argentine Republic."

DIKES.—Venezuela.—The Congress of Venezuela has appropriated the sum of 200,000 bolivars (bolivar $0.193) for the construction of dikes along the banks of the Apure River to protect the city of San Fernando, which is situated about 140 miles above the point where the stream empties into the Orinoco River.

SANITARY PROJECT.—Spain.—Bids will be received for carrying out an important scheme of sanitary and drainage works for the betterment of the Calle de Preciados extension and the joining up of the Plaza del Callao with the Calle de Alcala. The cost is placed at 28,992,276 pesetas (about $5,798,400), and to qualify any bids a provisional deposit of 500,000 pesetas (about $100,000) will be required, to be increased by the successful bidder to 5% of the total price. Bids should be addressed to the Excelentisimo Senor Alcalde, Casa Consistorial, Plaza de la Villa 5, Madrid, and must reach their destination by 2 p. m., Nov. 12, a provisional adjudication taking place at noon, Nov. 13. The work will comprise the demolition of buildings, paving, asphalting, drainage, water-works, building operations, lighting, electric tramway construction, etc.

RAILWAY EXTENSIONS.—Transvaal.—The Central South African Railway Board, Pretoria, has been authorized to build the following extensions, for which the Transvaal Government will advance a sum not exceeding $6,150,000 to the Board towards the cost of the work: An extension of the Pretoria-Pietersburg Railway from Pietersburg to a point at or near Bandolier Kop, 64 miles; (estimated cost, $1,250,000). A line of railway from Welverdiend Station to a point at or near Lichtenburg, with a westerly extension from a point at or near "Tremfontein" No. 12, 154 miles ($2,000,000). An extension from Ermelo to Piet Retief, 72 miles; ($1,275,000). A line of railway from Geduld Station via Benoni to a junction with the Germiston-Ermelo Railway at a point 8¼ miles east of Germiston, 13 miles; ($375,000). An extension of the Komati-Selati Railway to a point at or near the Great Letaba River, 150 miles; ($2,750,000).

EXAMINATIONS.

JUNIOR ENGINEER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Nov. 23-24, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Junior Engineer in the Geological Survey, at salaries ranging from $840 to $1,200 a year. Age limit, 21 years. Application form 1312.

JUNIOR CHEMIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Nov. 24, to secure eligibles from which to make certification to fill several vacancies in the position of Junior Chemist in the Geological Survey, at salaries of from $960 to $1,200 a year, and vacancies requiring similar qualifications as they may occur in that Survey, unless it shall be decided in the interests of the service to fill any or all of the existing vacancies by reinstatement, transfer, or promotion. Age limit, 21 years. Application form 1312.

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

HYDRAULIC MINING EQUIPMENT.—The Quesnelle Hydraulic Gold Mining Co., Quesnelle Forks, via Ashcroft, B. C., Canada, is constructing, through Burr & Fergusson, Engrs., Vancouver, B. C., a 20-mile ditch system and desires that catalogs should be sent for supplies needed in the construction of dams, tunnels, ditches, flumes, steel and wood pipe lines and general mine equipment. Catalogs should also be sent to the engineers.

TRADE PUBLICATIONS.

WIRE-ROPE MACHINERY.—Watson Machine Co., Paterson, N. J. Paper; 6 × 9¼ ins.; illustrated.

Illustrated descriptions of stranding, twisting and other machinery for making wire rope, insulated wire and cables are given in this book, which is a collection of numerous bulletins bound together.

GATE VALVES.—Chapman Valve Manufacturing Co., 49 John St., New York City. Paper; 5½ × 8½ ins.; pp. 3; illustrated.

This pamphlet shows side by side photographs of a modern municipal water gate and a section of pine-log pipe with wooden gate valves taken from Park Row, New York City, during subway excavation.

FINISHES FOR CONCRETE AND STEEL.—Glidden Varnish Co., Cleveland, Ohio. Paper, 3 × 6 ins.; pp. 8.

The following articles are mentioned and briefly discussed: Wall size for concrete, concrete floor dressing, tinted waterproof finishes for concrete. Caen stone finish, transparent and other waterproofing coatings, and a graphite acid-proof paint for steel. Those familiar with the concrete industry need no argument to appreciate the importance of wall finishes, tints and floor paints for concrete.

HIGH-EFFICIENCY ELECTRIC LAMPS.—National Electric Lamp Association, Engineering Department, 4911 Hough Ave., Cleveland, Ohio. Bulletin D. Paper; 6 × 9 ins.; pp. 15; illustrated.

A paper by Mr. S. E. Doane, M. Am. Inst. E. E., before the Canadian Electrical Association, in Quebec, June 16, is here reprinted. It is entitled "Conservation of Natural Resources Through the Use of High Efficiency Lamps" and shows the decreased energy requirement for lighting with the newer incandescent lamps. This saving was held to be noticed in the coal consumption of power plants.

POWER PUMPS.—The Goulds Manufacturing Co., Seneca Falls, N. Y. Paper; 8 × 7 ins.; pp. 191; illustrated.

Triplex single and double acting piston pumps, rotary force pumps and centrifugal pumps are shown in this catalog. The bulk of the book is devoted to the triplex pumps, which are shown in a great variety of styles and sizes for all classes of work. Besides the pumps of this type for tank pumping and general water supply, special models are shown for boiler feed pumps, stuff pumps for industries such as paper making and mine pumps. General pages are given over to illustrations and descriptions of forms of drive for the triplex pumps, and show them with belt, silent chain and direct connection to electric motors and steam engines. On the last few pages are shown automatic controlling devices and other auxiliaries.

CONTRACTING ENGINEERS.—The T. L. Huston Co., Havana, Cuba. 10¾ × 9 ins.; pp. 111, mostly half-tone plates; illustrated.

For the past ten years Cuba has practically been in the condition of a new country, just opened up to the contractor and engineer and like all such countries has proved a fertile field for all construction work. Of the number of contractors who have taken advantage of this opportunity the T. L. Huston Co. must have been among the leaders judging from the variety and quantity of work shown in its new catalog noted above. This is entirely a series of remarkably clear and large half-tones illustrating construction work done by the company on railways, highways, bridges, culverts, reservoirs, tunnels, sewers, dams, residences, harbors and docks. Apparently nothing in the construction line has been omitted.

A STUDY OF THE OPEN HEARTH.—Harbison-Walker Refractories Co., Pittsburg, Pa. Leather; 4 × 6¾ ins.; pp. 91; illustrated.

Under the above title is issued a volume quite above the usual run of trade publications which contains a complete though concise treatise on the construction and operation of open-hearth furnaces. According to the preface, this book, originally intended for the use of the operating department of the Harbison-Walker company, aims to put into as concise form as may be the principles involved, together with such detailed descriptions as may render the subject matter plain to one familiar with no more than the most elementary principles of chemistry and metallurgy.

The six chapters treat respectively of details of construction, fuels, the acid open-hearth process, recarburization, the basic process and special processes such as the continuous, or Talbot, process and the duplex process.

DUMP CARS AND CARTS, SCRAPERS, PLOWS, ETC.—The Kilbourns & Jacobs Mfg. Co., Columbus, Ohio. Paper; two pamphlets; 6 × 9¼ ins.; pp. 96; 8 × 10½ ins.; pp. 15; illustrated.

The larger pamphlet is a descriptive list of drag and wheel scrapers, grading plows, contractors' dump carts, and a variety of wheelbarrows and trucks for construction and industrial work. The shorter pamphlet is devoted to contractors' dump cars, ranging from 1½-yd. narrow gage cars to 16-yd. standard gage cars designed for operation on railways. These last cars are dumped by air cylinders.

ELECTRIC MOTORS AND GENERATORS.—Crocker-Wheeler Co., Ampere, N. J. Bulletins 113 and 114. Paper; 7 × 10 ins.; pp. 7, each; illustrated.

Conditions frequently arise in the design of alternating current power stations, under which it is impracticable to have the prime mover mounted on the same shaft with the generator though directly driven. In order to meet these conditions large sizes of coupled-type generators have been developed and several machines of this class are described in Bulletin No. 114, recently issued.

Motors used on lathes, hoists, bloom shears, big rolls, and ammonia compressors are described in Bulletin No. 113. All important features of construction are explained and are illustrated from photographs that give details of construction. Other cuts show the motors installed for actual service.

PIPE JOINTING MATERIAL.—Arthur N. Pierson & Co., 1 Park Row, New York. Paper; 5½ × 9 ins.; pp. 8; illustrated.

The mixture of sulphur and sand used a number of years ago in New Jersey by Mr. Alexander Potter for securing tight joints in wet sewer trenches is described and its advantages set forth in this pamphlet. The material has been given the trade name "Pozite." It is packed in barrels of 300 lbs. net weight. The material is in the form of a fine dry powder, which melts readily when properly heated. On cooling, it is said that the cementing material thus formed has a tensile strength of 300 lbs. per sq. in. Instructions for using the pozite are given in the pamphlet, which also contains a statement of quantities required for joints of various diameter. Expressions of approval from users of pozite are printed.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 164.

DITCH WORK.

Monticello, Ill.

The Commissioners of Lake Fork Special Drainage District will receive sealed bids for cleaning out and enlarging the main ditch of aforesaid drainage district at the office of the County Clerk, Monticello, Ill., up to 10 a. m., Nov. 11, 1909. Length of ditch 54,800 ftt. Excavation 578,052 cu. yds. Address,

W. J. DAY, Engr.,
Bement, Ill.

SIDEWALKS.

Paducah, Ky., Oct. 30th, 1909.

The Board of Public Works will receive bids until 3:30 p. m., Tuesday, November 23rd, 1909, on approximately, as follows:

96500 sq. ft. Concrete Sidewalks.
17620 lin. ft. Granite Curbing.
17620 lin. ft. Concrete Gutter.
7250 sq. ft. Concrete Driveways.
1700 lin. ft. Cast Iron Drain Pipe.

Work to be commenced as early in the Spring of 1910 as weather will permit, and completed on or before October 1st, 1910. Certified check for $250.00, Construction and Maintenance Bonds required. Plans, specifications, etc., on file at City Engineer's Office.

L. A. WASHINGTON,
City Engineer.

CATSKILL AQUEDUCT.

CONTRACT 60.
ASHOKAN RESERVOIR.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, in Room 910, 299 Broadway, New York, until 11 A. M. on November 24, 1909, for Contract 60, for the construction of the Hurley dikes of the Ashokan reservoir, known as Glenford, Woodstock and West Hurley dikes. They are to be rolled earth embankments with concrete core-walls, and aggregate about 1.6 miles in length. The work is located near West Hurley, on the Ulster and Delaware railroad, about six miles northwest of Kingston, in the towns of Hurley and Kingston, Ulster County, New York.

At the above time and place the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at Room 906, at the above address, by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars, see Information for Bidders.

JOHN A. BENSEL,
President;
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.
J. WALDO SMITH,
Chief Engineer.
THOMAS HASSETT,
Secretary.

Situations Wanted

Surveyors.

YOUNG SURVEYOR, 7 years' experience in field and office, go anywhere, can furnish references. Address "P. B. 19," Engineering News, New York. 19-4t

Draftsmen.

TECHNICAL GRADUATE, two years' experience as draftsman on architectural, structural and reinforced concrete work desires position. New York or vicinity preferred; moderate salary; references. Address "R. B. 19," Engineering News, New York. 19-1t

Situations Open

STADIA RECORDER, experienced, also two men with experience as chainmen, and as stadia rodmen. Five to six weeks work in New York State. Give education, experience, wages wanted and state time when you can begin work. Address "O. B. 19," Engineering News, New York. 19-1t

WANTED—A Mechanical Draftsman; one having had a miscellaneous experience and capable of following up a scheme from its conception to a successful conclusion. Address "A. 18," Engineering News, New York. 19-tf

Miscellaneous Wants

CIVIL ENGINEER in vicinity of New York City with spare time would like to make plans, profiles, plotting, tracings, etc. Has typewriter. Address "M. B. 19," Engineering News, New York. 19-1t

FOR SALE

FOR SALE.

One 5-ton Champion steel horse roller.
One 5-ton tandem steam roller.
One 10-ton Aveling & Porter roller.
One 10-ton Kelley, and one 10-ton Monarch roller.
Two No. 4 Champion crushers.
One No. 0 Thew shovel.
No matter what you want, write us.

LAWRENCE MACHINERY & SUPPLY CO.,
Arcade Bldg., Phila. 19-1t

FOR SALE.

A First Class Machine Shop

Suitable for all kinds of job work and manufacturing. This is in the best of locations among hundreds of pumping plants in a live city in Southern California. Stock and machinery will invoice about $7,000. All tools as good as new. Does lots of business and can do more. Owner selling on account of poor health. Address "L. B. 19," Engineering News, New York. 19-4t

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